

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office.

VOL. LVI, No. 3.
WEEKLY.

BALTIMORE, JULY 29, 1909

\$4.00 A YEAR.
SINGLE COPIES, 15 CENTS.

Manufacturers' Record.

PUBLISHED EVERY THURSDAY BY THE
MANUFACTURERS' RECORD PUBLISHING CO.
BALTIMORE.

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Chicago—1116 Fisher Building.
St. Louis—543 Century Building.

Subscription, - - - - - \$4 a year
(payable in advance) to United States,
Mexico, Cuba, Porto Rico, Hawaii and the
Philippines.

To Foreign Countries (including Canada) in
the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as sec-
ond-class matter.]

BALTIMORE, JULY 29, 1909.

FOR BALTIMORE.

Leadership of Joseph C. Whitney, president of the Merchants & Miners' Transportation Co., in organizing a campaign for the strengthening of the commercial relations of Baltimore and the South, together with the aggressiveness shown by the Baltimore Bargain House in taking advantage of the extension to Jacksonville of the service of the Merchants & Miners' Transportation Co., as a dramatic means of fixing upon Baltimore the eyes of thousands of Southern buyers, has done more to advertise Baltimore and its advantages in the South than all the combined efforts during the past five years of organizations which are supposed by their supporters to be efficient agents in promoting the trade growth of the city. There has been much talk of what Baltimore ought to do and of what Baltimore wants, and many individual merchants have maintained persistent canvassing of the Southern field with eminent success. But Jacob Epstein has, single-handed, given an illustration of the methods to be adopted in organized effort for the advancement of Baltimore's trade interests as a whole. *Opera non verba* is the keynote of the policy to be pursued. And the doing implies that in this day of close competition one must advertise liberally if one would extend his business. Jacob Epstein's advertising in this instance took the form of bringing to Baltimore as guests of the Baltimore Bargain House shiploads of Southern merchants, so that with their own eyes they might perceive the benefits of spending in Baltimore money for their stocks of goods. By the time a thousand mer-

chants have thus been entertained the Baltimore Bargain House will have spent at least \$50,000. But the MANUFACTURERS' RECORD is sure that as a business-getter no like sum has ever been better spent by any Baltimore concern. The immediate profit to the enterprising house is of small moment compared with the benefits that will accrue to it through the ever-widening circles of advertising given it in the South and the consequent ever-swelling stream of business that will come to it. This object lesson should not be lost on Baltimore. While there is a proposition before the business community that \$50,000 be raised annually to advertise the business of the city, an individual business man has spent \$50,000 to advertise his one line of business.

In this connection we must congratulate the Baltimore *Sun* for the excellent work it is doing for Baltimore and the South through the intelligent correspondence of a member of its staff now studying conditions in leading Southern cities. As set forth clearly and fully by him, these conditions merit the careful and practical consideration of Baltimore merchants and manufacturers, who, if they act upon the suggestions in the correspondence, will benefit themselves, the community and the South. If all the Baltimore daily newspapers should keep in close touch all the time with the South on the lines followed in the special correspondence of *The Sun*, there would be no possibility of Baltimore's failing to maintain its standing as a distributing center for Southern trade.

GALVESTON EXPORTS.

It looks as though Galveston is to shine out signally as one of the few ports of this country showing increase in exports during a year in which the foreign trade of the world reflected industrial and commercial depression. That Texan port presents some interesting exceptions from the general tale of export trade of the country during the past fiscal year. In exports of domestic merchandise from all ports there was a decrease from \$1,834,786,357 in 1908 to \$1,638,471,433 in 1909, or \$196,314,924, the total in 1909 being less than the total in 1906. Marked decrease in 1909 under 1908, aggregating \$110,572,572, were in breadstuffs, from \$205,350,759 to \$150,653,216, or \$54,697,543; in meat and dairy products, from \$170,498,626 to \$146,280,220, or \$24,218,406; in cotton, from \$437,524,111 to \$417,124,818, or \$20,399,293, and in cattle, sheep and hogs, from \$29,193,385 to \$17,936,055, or \$11,257,330.

At 19 leading ports handling breadstuffs there were decreases with the exception of two, Galveston and San Francisco, and it is suggestive of the trend of movement of breadstuffs to the Gulf that, with New York showing a decrease of \$7,912,006 and Baltimore a decrease of \$9,927,058, Galveston shows an increase from \$13,991,267 to \$14,057,561, or \$66,294, a small one, to be sure, but yet significant. This increase in bread-

stuffs is not sufficient to overcome the decrease in meat and dairy products and food animals at Galveston, amounting to \$531,520, Galveston being one of 11 ports showing decreases in the total of 14 ports handling such merchandise. But there is more than compensation in the exports of cotton. During the 10 months of the present cotton year, from September to June, inclusive, this country exported 8,279,685 bales of cotton, valued at \$401,793,943, an increase in the number of bales of 1,000,904, but a decrease in value of \$26,043,882. At 17 of the 29 leading ports there were decreases, some of them being \$436,556 at Baltimore, \$3,754,056 at Boston, \$14,540,946 at New York, \$15,627,597 at New Orleans, \$8,512,676 at Savannah and \$9,980,200 at Wilmington. Against these decreases the increases were comparatively slight at all the other 12 ports with the exception of Galveston, where the increase was \$22,557,406. The value of all domestic merchandise exported from Galveston in the fiscal year 1908 was \$161,020,933. The three leading items in the export trade show this year a total at Galveston of \$169,277,184, an increase of more than \$8,000,000.

A BIG GOVERNMENT JOB.

Mr. B. N. Baker of Baltimore, an expert in transportation, who, until it was absorbed by the International Mercantile Marine, was president of the Atlantic Transport Line, one of the greatest of our ocean-carrying concerns, has recently made a thorough study of traffic conditions across the Isthmus of Panama, and presents elsewhere in this issue of the MANUFACTURERS' RECORD some remarkable facts showing that American importers have to pay greater freight rates than those paid by English, French and German importers on goods handled by the Panama Steamship Co. and the Panama Railroad Co., both owned by the United States Government.

Mr. Baker suggests that it is useless to discuss the duty on hides while a railroad and steamship line owned and operated by the Government charges American importers of hides very much higher rates than they charge European buyers of hides. After giving in detail the rate of freights across the Isthmus of Panama and to Europe and New York, Mr. Baker says:

"An American importer pays the Panama Railroad Co., owned and operated by the United States Government, \$2.50 a ton more, if from Central America, and pays the Pacific Coast Steamship Co. \$3.60 a ton more on hides than an English, French or German importer pays," and this, too, notwithstanding the fact that the distance from Colon to New York is 1981 miles, while the distance from Colon to Liverpool is 4962 miles, and from Colon to Hamburg 4992 miles. Comment is almost superfluous. How many other lines of industry are handicapped in the same way by exorbitant charges over the Government-owned railroad and

steamship company which gives European merchants great advantages over their American competitors?

Mr. Baker's facts are not less than startling in their significance.

Is it not about time for the United States Government to investigate itself?

BALTIMORE AND FREE IRON ORE.

By telegram the conferees on the tariff at Washington have been informed of the hope that removing the duty from imported iron ore will benefit the export grain trade at Baltimore. When the hope was expressed two months ago the MANUFACTURERS' RECORD showed its fallacy by a comparison of the importations of iron ore and the tonnage of vessels cleared at Baltimore. The comparison may be worth repeating. Between the fiscal years 1906 and 1907 the importations of iron ore at Baltimore fell from 625,300 tons to 576,747 tons, or by 7.7 per cent., but the tonnage of vessels cleared with cargoes fell only from 1,473,393 to 1,384,362, or by 6.1 per cent., and between 1907 and 1908 the importations of iron ore fell from 576,747 tons to 432,986 tons, or by 24.9 per cent., but the tonnage of vessels cleared with cargoes fell only from 1,384,362 to 1,368,303, or by 1.1 per cent. Between 1906 and 1908 the tonnage of iron ore imported fell from 625,300 to 432,986, or by 30.7 per cent., while the tonnage of vessels cleared with cargoes fell only from 1,473,393 to 1,368,303, or by 7.1 per cent. These figures do not seem to offer any ground for hope that more importations, superinduced by freedom from duty, would increase the facilities for foreign trade at Baltimore. The figures, showing a diminution in ore importations at a greater rate than the diminution in the aggregate tonnage of vessels carrying cargoes from Baltimore, indicate very little, if any, interdependence between importations of iron ore and the export trade in grain or any other article at Baltimore.

The tariff conferees should demand facts showing how many of the vessels bringing iron ore from Cuba, Spain and South American ports to Baltimore have carried from Baltimore cargoes of any kind to other ports.

There is another phase of the question of Baltimore and free iron ore which some folks in Baltimore, under the weight of primary self-interested suggestion, seem to be overlooking. Baltimore is just at present stirring for closer industrial and commercial relations with the South. There are parts of the South with vast deposits of iron ore to be sold and manufactured. The admission to this country free of duty of foreign iron ores will be a direct blow to the iron industry of the South, and if the South understood that the special pleas from Baltimore for free iron ore represent the attitude of Baltimore generally, which would be a mistake, the South might not be enthusiastic about closer business relations with Baltimore. Illustrative of well-balanced opinion in the South are telegrams

which have been sent to the President from the Birmingham district, following the publication there of a telegram from the MANUFACTURERS' RECORD urging the President to consider the South in his survey of tariff necessities. One telegram read:

Protection on iron and iron ore made possible investments of \$100,000,000 in iron industry in Alabama. Free iron ore would not only seriously jeopardize this investment already made, but would prevent further investment now in sight. Our ores are low grade, and, owing to our geographical position, entailing heaviest freight rates in country, we could not compete with manufacturers situated on seaboard and using foreign ores mined with cheap labor and carrying low ocean freight rates. This district feels it must have duty on ore.

This telegram was signed by G. M. Cruikshank, editor of the Birmingham Ledger; Rufus N. Rhodes, editor of the Birmingham News; W. H. Hassenger, president of the Southern Iron & Steel Co.; Guy R. Johnson, vice-president of the Alabama Consolidated Coal & Iron Co.; J. W. McQueen, vice-president of the Sloss-Sheffield Company; C. E. Foust, president Birmingham Car & Manufacturing Co.; Erskine Ramsey, J. W. Farrior, Tyler Grocery Co., Collins & Co., Moore & Handley Hardware Co., Wimberly & Thomas Hardware Co., and many other prominent men and firms. Another telegram from T. G. Bush read:

I believe free ore and free coal would produce inequalities in the tariff that would discriminate greatly against Southern interests.

A third telegram, from Chas. A. Stillman of Rogers, Brown & Co. read:

I believe that any further reduction in Senate tariff schedule on ore, coal and scrap iron would be harmful to the iron and coal industry and especially hurtful to this district.

This last telegram touched upon a schedule, that relating to scrap iron, which has not been brought prominently to the front. It suggests that free scrap iron or a marked reduction of duty upon scrap iron would probably cause pig iron to disappear from import records, though more pig iron than ever would be imported, to the detriment of American pig-iron producers.

There is much in that for Baltimore to consider.

A COTTON CHANCE.

Luther Burbank has been requested by the Georgia Legislature to include the cotton plant in his experiments. The expectation seems to be that the Californian who has accomplished such wonders in the breeding of other plants may produce a cotton of a longer and more even fiber than that now generally raised in the South. Success at that would vastly increase the value of the South's cotton crop, but it is hoped that the resolution may direct Luther Burbank's attention to a chance as to cotton which, if seized, would, it is believed, work a revolution greater even than that which followed the invention of the mechanical wheat reaper. Nature marked out this chance four of five years ago in Northern Texas when November frost first nipped the tops of growing cotton plants and then later ended the growth of the plant before the bolls had completely opened. As was pointed out at the time by the MANUFACTURERS' RECORD, the nipping of the tops of the plant seemed to hasten the development of the bolls already formed, and when these were put through a threshing machine modified slightly the results were so satisfactory that cotton plants that otherwise would have been neglected added about \$2,000,-

000 to the total value of the crop of that year.

Ever since then we have endeavored to interest the agricultural experiment stations in the several cotton States to elaborate upon nature's nipping of the cotton plants for the purpose of discovering whether the cotton plant may not be so treated mechanically as to insure a simultaneous ripening of practically all its bolls. Such a mechanical treatment, the character of which might be determined by nipping cotton plants at different stages of growth, would necessarily tend to reduce to some extent the number of bolls on each plant, though it might improve the quality of the remaining ones. But the loss in number, even though there might be no improvement in quality, would, if the experiment should work out according to this conception, be far more than made up by the tremendous economies made possible in the harvesting of the crop. These economies would permit a wider area of cotton cultivation and such a diminution in the cost of making the crop that it could be sold at lower prices than those prevailing and still yield larger profits than at present to the growers.

The economies in handling involve the invention of the thresher gin and the cotton reaper. These inventions mean the real picking of cotton away from the fields. All of the experimental cotton pickers cling to the idea of picking the cotton in the fields. It may be possible that the picker which is to revolutionize the cotton-growing industry will handle indoors the whole cotton plant reaped by a machine which will be a modification of the wheat-reaping machine, such a picker to be a modified combination of the threshing machine and the gin. At least the chances for success justify a closer study of the situation than has been given to it.

FIFTY YEARS OF STREET CARS.

The United Railways & Electric Co. of Baltimore has just celebrated the fiftieth anniversary of the beginning of street-railway service in the city. It was on July 26, 1859, that the first horse car was operated in Baltimore, only one car being run that day upon about a mile and a half of track. Now the company has 750 cars daily operated and over 400 miles of track, the present organization, which is a monopoly, representing the consolidation of a number of companies which followed the beginning of 50 years ago. Where there were then only one conductor and one driver there are now 4500 men employed, and the character of vehicle used has grown from the slow, uncomfortable horse car to the large double-truck high-speed electric car, equipped with electric lights and bells, and some with electric whistles and specially powerful lights for use in suburban districts.

Baltimore was always a progressive city in matters relating to railroads, and as the history of steam lines shows that the beginning of many improvements was at Baltimore, so the record of street-railway development discloses numerous progressive steps in this city. It is true that Baltimore was long content with horse cars, but it was one of the first cities in the country to witness the operation of an electric railway for regular service. This was the line running from a point in the Northern Annex to Hampden and Woodberry, and it was run successfully and continuously for a year or two in the '80s. Owing to the primitive character of the

equipment it was difficult to operate, and was replaced by horse cars, which continued until the introduction of modern electric service. But it cannot be claimed that Baltimore was anything like a pioneer in the use of cable roads. It was not until the spring of 1891 that the first cable line was put in operation in Baltimore, and while several roads were so equipped, the rapid perfection of electric railways prevented extensive adoption of the cable system, and it was not long before the cable railways were replaced by electric lines.

Yet, long before electric cars were thought of Baltimore took steps to investigate proposed faster methods of operating street railways, looking to relief from the slow horse-car service. A steam motor was tried, the exhaust being muffled so as to avoid frightening horses, but the tracks then used, being merely flat rails spiked to stringers, were not fit for rapid transit, and even if the steam motor with its trail car had met approval, the permanent way could not have long stood the wear and tear of such equipment. That was in the '70s, and people had to wait for 10 years before they saw the first rays of dawn of the electric railway in the form of the line to Hampden and Woodberry.

In commemorating the birth of street-railway service in Baltimore the United Railways & Electric Co. kept open house at its various parks as well as on its lines, its employees and their families being the guests of the day. It was made a gala occasion, one which was enjoyed to the full, the weather being fair and pleasant, although it was midsummer. Thousands participated in the celebration, and the equipment and buildings of the company were appropriately decorated. Although an extraordinarily large number of passengers were carried, all were handled without accident, testifying to the excellence of the company's organization and the perfection of modern electric-railway service.

The officers of the company have much to be proud of in contemplating the great organization which they direct and control. It is one of the best of its kind to be found anywhere, and men who are capable of accurately estimating its efficiency—as, for instance, managers of various forms of large public amusements—have approved of its capable methods of handling crowds of passengers within a limited time in unstinted terms of praise. Not only have such capable judges granted it hearty commendation, but not a few individuals of the general public—that hardest of critics—have also spoken in high terms of its efficiency. It is no more than just to note these facts in concluding these words relative to street-railway progress in Baltimore.

IMPETUS FOR THE SOUTH.

Chas. E. Speer & Co., real estate, Memphis, Tenn., referring to the fact that for a year he has been a constant reader of the MANUFACTURERS' RECORD, writes:

The benefits I have derived are incalculable, and so it must be to every intelligent person who reads it. Today I am posted on every industrial movement in the South, regardless of what the movement may be, and to be deprived of your publication would be to me next to a calamity.

One thing in particular regarding your paper is that what is printed is authentic. Comparisons made by me bear out this statement. Your paper is for the South, and the South is prospering and developing through its columns. Your article of June 17, entitled "Sunrise in the South," is a wonderful recapitulation of facts, and I wish it were possible to have every young man in our South read this article.

To read your paper is like hearing an in-

teresting lecture, and I trust it has awakened in others of the South, as it has in me, a keen interest in the South's welfare and development. That the South is awakening is no idle fancy. Our people are becoming restive. They are beginning to realize the South's great resources, and instead of being content to sit idly by and be satisfied in following the pursuits of their fathers, which was mostly that of planters, professional men, cotton factors, grocers and bankers, they are now anxious to learn other pursuits of life, which means manufacturing, scientific farming and developing at home that which has heretofore been taken from the South and manufactured elsewhere, all because we knew not how. To do a thing we must first learn how it is done, and this we are doing. Our young men are becoming restive; they want to learn, and with the true American spirit they are learning. It is not a far-fetched point to make when I say the time is not far distant when the young men of the South will lead the world as experts in every line, whether it be the manufacturing of shoes, cotton into cloth, lumber into its hundreds of articles, diversified farming, building of railroads, iron into steel, or whatever else taken in the raw from our South. We want to learn; we have the inclination, we have the brains, and we are willing. Can anything but success overtake us? Thanks to the MANUFACTURERS' RECORD for the start.

VIRGINIA HIGHWAYS.

In all but ten of the one hundred counties of Virginia highway improvement is under way under the provisions of law dividing \$250,000 from the State treasury among the counties in proportion to the taxes paid by them, conditioned upon the counties appropriating to the purpose a like amount. The improvements include the building of first-class roads and the throwing of bridges across the streams. The present movement for improved highways dates from the session of the General Assembly of 1906, and now already 130 miles of roads have been constructed, 193 miles more are contracted for or in process of building, and plans have been made to begin in a short time work upon 136 miles more. Moreover, surveys have been made for 141 more miles, and applications are pending for surveys of 138 more miles of roads. The new law permits a county to use the money apportioned to it from the State treasury in payment of interest on bonds or the liquidation of such indebtedness for good roads, and under that provision \$900,000 of bonds have already been issued.

These facts of gratifying progress are derived from an article published on another page of this week's issue of the MANUFACTURERS' RECORD, in which Gov. Claude A. Swanson discusses clearly the great future for Virginia through the construction of good roads. The survey he presents reveals enthusiastic interest of local authorities and citizens generally in highway improvement and alertness on their part to its social and economic value. His article will certainly inspire his State to greater activity and ought to give an impetus to the movement in the whole South.

WHAT A SMALL AD. DID.

Ben. A. Morton, president and general manager the H. T. Hackney Coal Co., Knoxville, Tenn., in a letter to the MANUFACTURERS' RECORD, referring to the small advertisement he had in one issue of this paper, writes:

I will not want to run the ad. any longer, because the one insertion brought a flood of inquiries. It was truly remarkable the large number of inquiries the ad. brought forth, especially in view of the fact that it was only a few words and placed with a large amount of other advertising in your "For Sale" columns, and proves to me that your advertisements are carefully considered by the buying public.

INCREASING PRODUCTIVITY OF AMERICAN SOIL.

The value of farm products in the census years 1880, 1890 and 1900 and for several recent years was as follows:

1880.....	\$2,212,000,000
1890.....	2,456,000,000
1900.....	4,717,000,000
1905.....	6,415,000,000
1906.....	6,794,000,000
1907.....	7,412,000,000
1908.....	7,800,000,000
1909 (estimated).....	8,300,000,000

The striking fact in this table is the small increase in the value of farm products between 1880 and 1890. In that 10-year period, notwithstanding the great increase in production, there was a gain of only \$250,000,000, or a total increase in 10 years of less than 10 per cent. In the next six years, from 1890 to 1896, there was very little increase in value, although the production still continued very heavy, but between 1896 and 1900 there was a very rapid gain in values, bringing the total for 1900 up to \$4,717,000,000, or nearly double the value of the output of 1890. Since 1900 this gain has continued unabated, every year showing a large advance over the preceding year. It is quite possible, based on present prospects, for the total value of agricultural products for 1909 to run \$400,000,000 or \$500,000,000 over the total of 1908 and give an aggregate of, say, \$8,300,000,000.

Under these conditions one is not surprised that the farming interests of America are enjoying a greater degree of prosperity than ever known before.

American farmers are proving that they have much more sense than some leading public men have been willing to credit them with. The pessimistic cry heard throughout the land for several years that the farmers are destroying the fertility of the soil, and that the average yield per acre of leading crops is decreasing is one of the things that would come under the head of being interesting if true. It is not, however, true. Therefore, it is of interest only as proving how deeply a false impression persisted in can sink into the public mind. The average man believes that our yield of leading staples is gradually decreasing. He believes that the fertility of our soil is being destroyed. Had he not been told these things by men accepted as authorities? It is not his place, he thinks, to investigate, and possibly he has neither the time nor the facilities. He accepts what others have said, and knows not that these statements are not founded on fact. The men who have made such statements have not wilfully misrepresented the case; they have simply failed to thoroughly investigate the matter. Some of them have taken the average yield per acre of crops in a year of bountiful harvests and compared this with the average yield in a lean year, and have based their conclusions on such misleading figures as these. Hence their error.

It is said of a once-noted orator that when charged with not sticking to facts he replied, "Facts embarrass me." Even if he said this he had more to his credit than many speakers and orators of today, for facts never seem to embarrass them. If facts are contrary to their theories, so much the worse for facts. They stick to their theories regardless of facts. They are unlike the noted scientist, Agassiz, who, according to the story, once denied the possibility of a certain kind of fish attaining a certain weight in the rivers of Maine. Scientific investigation, he said, had proved the impossibility of that fish growing to the size mentioned by his senatorial friend. His theory was, in his opinion, all right. A few months afterward, however, he received from his fishing friend a fish of that particular size with convincing testimony that it was caught in the waters of Maine. In reply, according to the story as told, he telegraphed, "One fact has knocked out a bushel of theories." In these days one theory often knocks out a bushel of facts. This is especially true in some of the discussions regarding conservation with which the country has been flooded during the last 12 months, and is pre-eminently true in regard to many of the elaborate articles written and public addresses made within the last year or two to prove that there has been a great decrease in the average production of grain, due to bad farming and the deterioration of our soil. Based on this theory many lugubrious pictures have been drawn of the wreck and ruin of American civilization because of the destruction of our soil and the inability of the country to increase its output of foodstuffs sufficient to meet the needs of the coming years. It is quite probable that we shall not continue to export wheat as heavily as we did some years ago, but if we can find a profitable market at home for all the wheat that American farmers raise, why should they be concerned, or, for that matter, why should the country be concerned because of our failure to export wheat if we can more profitably consume it at home. For many years American farmers exported their wheat at little or no profit, the selling price being scarcely equal to the cost of production. To the theorist that may have indicated prosperity, but to the grower of wheat it spelled poverty.

That our production of wheat per acre is very much less than the average production in France and England is a fact that is known to everyone. That we have not been forced by conditions running over a thousand years, with dense population making every acre exceedingly costly, to develop the intensive system of farming prevailing in those countries is likewise known. And the reasons for it are perfectly logical. When the rush of immigration to our country at the opening up of the great prairies of the West brought about the enormous increase in grain production, it was only natural that the land should be overcropped and result in a decrease of the virgin fertility of those days. The pioneer building his rude log hut, striving to make enough to pay for his improvements and care for his family, was compelled to get the largest possible immediate results out of his land. No sensible man studying the situation could expect otherwise. And so under these conditions, as the limit of new territory to be opened up was reached, it was found that there was a gradual decrease for some years in the average yield of crops per acre. But 15 or 20 years ago a change took place, and the pessimists are still reasoning on the facts that existed at that time, and not on the things that have taken place in the last two decades. When the pioneer had been able to accumulate a little money and build a better home he naturally turned to the improvement of his land. About that time the work of the agricultural colleges throughout the country awakened a widespread interest in the improvement of the soil. For 15 or 20 years thousands of plodding men of science in agricultural colleges, and those taught in these colleges, have been at

work, the one teaching and the other practicing the best methods of soil restoration. When they had won out and the farmers of the land were showing a steady improvement in their average production per acre, the much-heralded conservation orators rushed to the front with their tales of destruction of soil based on false theories, and without any knowledge of what had been going on during the last 15 years or more.

Instead of the yield of crops decreasing, there is, on the contrary, a steady increase in the average yield per acre. Instead of a declining fertility of our soil, there is a very marked increase in its fertility. In place of the barren hill-sides that were being washed away 10 or 15 years ago, terracing has become quite general, and tens of thousands of acres which then were worthless, cut by great gullies, an eyesore to the traveler and a hopeless, useless piece of property apparently to the owner, are now producing profitable crops. These same hill-sides have been terraced, the soil has been restored to fertility, and even more has become more valuable than before the first timber was cut from it, for under this new system it has been proven that it can be made perpetually to yield large crops.

In making a study of agricultural conditions it should be borne in mind that a comparison between a full year and a lean year counts for nothing. This is a false basis on which to predicate an argument. If we would find a right basis for our calculations it is necessary to take the average of five or ten-year periods. Only in this way can an intelligent comparison, one worth considering, be obtained. On this basis let us examine the average production of grain per acre in 10-year periods:

	1869-78.	1879-88.	1889-98.	1899-1908.
Corn.....	26.5	24.2	24.4	25.8
Wheat.....	12.2	12.1	13.2	13.8
Oats.....	28.5	26.6	25.8	29.3

These figures strikingly illustrate the point previously made, namely, that after the opening up of the prairie country there came a gradual decrease in the average yield per acre, but that this period passed away with the development of scientific farming methods under the lead of agricultural colleges some years ago. It will be noted that in the production of corn, wheat and oats there was a decrease in the average yield of the 10-year period of 1869-78 to the 10-year period of 1879-88. Corn decreased on the average of 2.3 bushels per acre, wheat a fraction of a bushel per acre, and oats nearly two bushels per acre. In the next 10-year period there was a slight improvement in corn, a gain of over one bushel average per acre in wheat, but a decrease in oats. Thus 10 years ago the tide had been turned and the figures were moving for improvement. In the last 10 years there has been a still further gain. Corn in that period showed an advance of 1.4 bushels per acre over the preceding 10-year period, while wheat showed a gain of .6 bushels per acre over the preceding decade, and a gain of 1.7 bushels per acre over the period between 1879-88. The average production of wheat for the 10 years ending with 1908 was the largest in any 10-year period for 40 years. And yet we have been told over and over again that the wheat production of the country per acre was steadily declining. In the same 10-year period ending with 1908 oats showed likewise the largest yield per acre in the four 10-year periods under discussion.

It will be of interest to make a comparison along similar lines in the central wheat and corn belt of the West, especially in the older States, where wheat and corn cultivation have passed through the three stages of overcropping, of soil improvement and of a gradual restoration of fertility and increased yield per acre. Take, for instance, wheat in the same 10-year periods:

Wheat, Average Yield per Acre, Bushels.

	1869-78.	1879-88.	1889-98.	1899-1908.
Ohio.....	13.5	13.9	14.7	15.9
Indiana.....	12.3	13.5	13.9	14.1
Illinois.....	12.1	13.6	13.7	14.9
Minnesota.....	14.4	12.2	14.4	12.6

In these figures it is shown that Ohio is now producing a much larger yield of wheat per acre than it did 40 years ago, the gain in the last 10-year period being 2.4 bushels per acre as compared with the period of 1869-78. In these four 10-year periods there has been a gradual but steady advance. The same thing is true in Indiana and in Illinois. Indiana has advanced its wheat production from an average of 12.3 bushels per acre in the 10-year period 1869-78 gradually to 13.5 bushels in the next 10-year period, then to 13.9 bushels, and then in the last 10-year period to 14.1 bushels. Illinois has kept even pace with Ohio and Indiana, and in not a single 10-year period was there a decrease, but, on the contrary, a steady gain, so that in the last period there was an increase in the average production per acre compared with the first period of over 20 per cent. Minnesota is the only exception in the four States. Starting in 1869-78 with an average yield per acre of 14.4 bushels, there was a drop to 12.2, and from that an advance to 14.4, and then another drop, showing that Minnesota has not yet reached the stage of steady, sure soil improvement of Ohio, Indiana and Illinois. This is not surprising. Minnesota was settled later than the other States. The fertility of its soil was overtaxed, and it has not yet developed the intensive system of farming and soil improvement to the same extent as the others, and therefore it is an exception to these States and an exception to the country as a whole. Doubtless the decline in this one State has been the reason for some of the statements that have been put forth regarding the alleged decrease throughout the country.

Turning from wheat to corn and it is seen that the same general conditions in these individual States have prevailed.

Corn, Average Yield per Acre, Bushels.

	1869-78.	1879-88.	1889-98.	1899-1908.
Ohio.....	35.3	31.4	30.6	35.3
Indiana.....	31.3	29.3	30.4	34.4
Illinois.....	28.5	27.	31.4	34.5
Minnesota.....	31.9	30.1	27.6	28.9

In Ohio there was a decline in corn production from the 35.3 bushels as the average yield per acre for the 10 years ending with 1878 down to 30.6 bushels for the decade ending with 1898. From this, however, there was a rapid gain, and during the next 10 years the average rose to be exactly the same as in the first period. In Indiana there was a similar decline and a similar advance, but in this State the average for the last 10-year period was 3.1 bushels higher than in any 10-year period of the preceding 30 years. In Illinois a decline took place

between the 10-year period of 1869-78, but a turn commenced in the period 1889-98 for an upward movement, steadily increasing until in the last 10-year period the average was 6 bushels higher than in the first 10-year period, thus showing, taking the whole 40-year period, that the loss during the earlier period had been regained and a much higher standard set. In Minnesota there was a steady decline from 1869-78 period to 1889-98 period, but in the next 10-year period there was an upward movement, showing that in corn that State is beginning to share with adjacent States in the better cultivation and increasing fertility of its soil.

Between 1870 and 1890 agricultural products increased in quantity more rapidly than population. In one or two instances particular years would show a tendency to a decrease, but as a whole that 20-year period marked a large expansion of agricultural output beyond the increase in population. In 1870 the number of cattle per capita was .39. This rose by 1880 to .42, and by 1890 to .50. In swine there was an increase from .69 in 1870 to .82 in 1890. The production of wheat in 1870 was on the basis of 6 bushels per capita, and in 1880 it rose rapidly to 9.9 bushels per capita.

Under this steady increase in the aggregate volume of agricultural output, including cattle and swine, there was a very marked tendency to a decrease in the price of farm products. This reached a culminating low-price period between 1890 and 1895. With the great increase in production there came a steady decrease in value, and the farmers of the country were growing steadily poorer. It was due to this condition that free-silver agitation found favor in the agricultural districts. The farmers knew that they were raising great crops, but that the larger the crops the poorer they became. Under these conditions there was a continuation of the rush from country life to city activities, and a growth of industrial interests furnished a market for surplus labor, and thus increased the consumptive requirements of the country. Gradually year by year increasing consumption gained on the production of agriculture. The inevitable result was higher prices for farm products. As the farmers had grown poorer for 10 years up to 1894-5 under increased production and decreased prices, so in the last 10 years they have grown steadily richer under decreased production per capita and increased prices. Within the last five or six years high prices for farm products have again developed a tendency to a large farm output, and in 1908 the number of cattle, sheep and swine in proportion to population, and the production of corn and wheat in proportion to population, were much larger than in 1900.

But the proportion per capita of cattle, sheep and swine is still considerably less than in 1890. Comparing the three years of 1890, 1900 and 1908, we have the following:

Number of Cattle Raised and Amount of Grain Production Per Capita.				
	1890.	1900.	1908.	
Cattle, number.....	.59	.36	.57	
Sheep, number.....	.70	.55	.62	
Swine, number.....	.82	.48	.64	
Corn, bushels.....	23.8	27.5	30.6	
Wheat, bushels.....	6.3	6.8	7.6	
Oats, bushels.....	8.3	10.6	9.2	

These figures show that the number of live-stock in the country in proportion to the total population was a little less of cattle in 1908 than 1890, and was much less of sheep and swine. In corn there has been a steady gain in production per capita since 1890, rising from 23.8 bushels in that year to 30.6 bushels in 1908, but the production per capita in that year was still less than in 1880, when it was 34.2 bushels. In wheat the average per capita production of 6.3 bushels in 1890 rose to 6.8 bushels in 1900, and to 7.6 bushels in 1908. But notwithstanding this steady gain during the last 18 years, the production per capita is less than in 1880, a year of phenomenal yield. In this discussion no account is taken of foreign exports of meats or of breadstuffs. The figures presented are given simply to show that as an outcome of the large increase in farm products up to 1890, and for a year or two thereafter, there was a large decrease in their value, while after that period there was a decreased output in proportion to population, and then there came an increase in price, which is again resulting in a gradual but steady gain in the number of live-stock and in the output of grain in proportion to the population. This, however, has not yet run far enough to indicate any likelihood of an early decline in the price of farm products. It would seem that we are still in a period of high prices, for the vast expansion of industrial activities and the prosperity created thereby has made a marked increase in the consumption of foodstuffs per capita. People are eating more meat and more bread than in days of poverty. Moreover, there is another factor that has some bearing on the situation. Within the last 15 or 20 years there has been a marvelous increase in hotel life in this country. The wastage in hotels aggregates an enormous total. There is scarcely a hotel in the land in which there is not enough food thrown away to supply more people than the total number of guests fed. This comes as a result of our methods of living, of the wasteful handling of food in hotels, and it must have more or less bearing upon the aggregate consumption of foodstuffs far beyond any estimate that has ever been made public.

It is interesting to compare in a number of years the total population and number of cattle, sheep and swine in the country. The figures are as follows:

Years.	Population.	Cattle.	Sheep.	Swine.
1870.....	38,558,371	15,388,500	40,853,000	26,751,400
1875.....	43,951,000	16,313,400	33,783,000	28,062,200
1880.....	50,155,783	21,231,000	40,765,900	34,034,100
1885.....	56,148,000	29,866,573	50,360,243	45,142,657
1890.....	62,622,250	36,849,024	44,336,072	51,602,780
1895.....	68,394,000	34,364,216	42,294,064	44,165,716
1900.....	76,302,387	27,610,054	41,883,065	37,079,356
1905.....	83,143,000	43,669,443	45,170,423	47,320,511
1908.....	87,189,392	50,073,000	54,631,000	56,084,000

These figures show that in 1890 we had 36,849,000 cattle in the country, and that from this high aggregate there was a steady decline to 27,610,000 in 1900. Though our population increased in that time nearly 14,000,000, there was a decrease of over 9,000,000 in the number of cattle. The high period in the number of sheep was in 1885, with 50,360,000, from which there was a steady decrease to 1900, when we had nearly 9,000,000 sheep less than in 1885, though in that period our population had gained 20,000,000. The high point in swine production was in 1890, prior to late years, with a total of 51,602,000, from which there was a decrease to 1900, when the number was 37,000,000, a loss of 14,500,000, notwith-

standing the great gain in population. It will be noted from the foregoing table that in 1908 cattle, sheep and swine had all again attained record numbers.

In connection with a study of grain production as indicating the increased fertility of the soil of the country at large, a similar study of cotton production shows that the South has likewise been making similar improvement in fertility. Comparing 1887 and 1888 with 1907 and 1908, we have the following table:

States.	Average Production Per Acre in Parts of Bales.		Years.	
	1887.	1888.	1907.	1908.
Alabama.....	.28	.29	.34	.32
Arkansas.....	.49	.50	.43	.39
Florida.....	.25	.27	.22	.21
Georgia.....	.30	.34	.35	.40
Louisiana.....	.48	.49	.55	.39
Mississippi.....	.36	.43	.44	.46
North Carolina.....	.33	.42	.46	.47
South Carolina.....	.31	.36	.38	.49
Tennessee.....	.38	.36	.37	.38
Texas.....	.36	.34	.44	.23
United States.....	.35	.32	.42	.36

This table shows that the largest improvement per acre was in the older States. The highest average yield per acre in 1908 was .49 bale per acre in South Carolina, against .36 in 1888; in 1907 South Carolina had an average of .38 bale per acre, against .31 in 1887. North Carolina was next to South Carolina in 1908. It had a yield of .47 and .46 in 1908 and 1907, against .33 and .42 in 1887 and 1888, respectively. In Arkansas the high production due to opening up of new land in 1887 and 1888 was not maintained in 1907 and 1908. Texas made a gain in 1907 as compared with 1887 and 1888, but adverse weather conditions produced a serious decline in 1908. That, however, did not in any way indicate a decline in fertility of soil. The average yield for the entire country was .35 in 1887 and .32 in 1888, whereas in 1907 the average was .42, or seven points above that of 1887, and 1908 was .36, or four points above that of 1888. The average production for the two years 1887 and 1888 was .369, while the average production for the two years 1907 and 1908 was .391 bale per acre, showing a general tendency to a higher average yield of cotton per acre of recent years as compared with 20 years ago, just as has been the case in the production of grain in the central West and of the country at large.

Agricultural conditions are steadily improving throughout the land. Farming is being done on a more scientific basis than ever before. Every year shows an advance. We now find that better agricultural implements, better methods of handling the soil, more intelligent diversification of crops and a better system of rotation in order to improve the soil.

All these things have been under way for the last 15 years, and great as has been the industrial advance of the country, it has been very nearly matched by the marvelous change in agriculture. From deep poverty, loaded with debts, almost in despair, as the farmers of all sections were from 1890 to 1895, abounding prosperity has blessed the farmers of the land. Farm mortgages have been paid not by millions only, but by hundreds of millions of dollars. Scientific farming, scientific breeding of live-stock, a lifting of the whole farming business out of the ruts of the primitive pioneer days is the order of the day. Restoration of soil has been going on steadily, and the farmer needed not to be told by the Conservation Congress how to accomplish this. He had already been vigorously practicing it for 15 or 20 years. The conservation orators were just 15 years behind the times, and their arguments were based on theories, not on facts, or rather their theories and their facts were 15 years out of date. They knew not whereof they spoke. But fickle human history will be so written as to give to them the credit for this improvement, which the steady workers in agricultural colleges and the practical farmers had already accomplished.

Brilliant as is the outlook for the industrial interests of the United States, marvelous as will be the expansion in commerce and in manufactures, equally promising is the outlook for the farmer. With the restoration of fertility to overcropped soil, with the giving of fertility to soil never before fertile, with the reclamation of millions of acres of the richest land in the world from overflowed prairies and swamps, with the irrigation of millions of acres of land which need but an inflow of water to blossom as a garden, the potentialities in agricultural production match the potentialities in manufactures. We have reached a period in American life where the farmers, like the manufacturers, are beginning to do business on a scientific basis, and where the profit, by reason of better methods of producing, of handling and of selling, will give them a greater prosperity than they have ever known in the past.

A TARIFF TELEGRAM.

Baltimore, July 22, 1909.

To The President.

Washington, D. C.:

If it be true, as claimed by many papers, that you are seeking to influence tariff legislation in favor of free iron ore, coal, lumber, etc., I beg to suggest the following for your consideration:

The South, so long handicapped by the financial difficulties following the War and by adverse legislation, has in recent years, under the existing tariff policy, been making great industrial progress. Its prosperity is now seriously threatened by tariff legislation. It asks for no favors not granted to other sections, but it earnestly protests at being sacrificed for the benefit of special interests in other sections. It is a producer of things erroneously called raw materials, such as iron ore, coal,

lumber, etc. To the miners of ore and coal and the timber men their output is as much the product of labor as is the steel rail or the watch spring. The South has a right to ask that what it produces should receive the same measure of protection as given to the products of other sections. There is as much reason for making free textile machinery for the benefit of Southern cotton mills, free steel rails for the benefit of railroads, as there is for making free iron ore for the benefit of the rail mills and the textile-machinery builders. Does not fairness to all sections and to all people of the United States demand equality in protection, that one section should not be sacrificed to enrich special interests in others?

With vast stores of ore reaching into billions of tons awaiting utilization; with three times as much coal as Great

Britain, Germany and France available for development; with nearly one-half of the standing timber in the United States, the South has resources enough for an industrial development greater than that of the whole country today to its own enrichment and to the enrichment of the entire land. But of what avail are these treasures, of what value to the South or to the country at large if unutilized, and if their further development is to be halted by the free importation of such materials mined or manufactured by labor receiving only a pittance compared with the wages paid in this country? If the South is forced by adverse tariff legislation to meet this pauper labor of foreign competition, it can only do so by forcing down the prices of its own labor to the almost starvation wages of foreign ore and coal miners.

Under the drawback provision of the tariff such so-called raw materials as enter into the manufacture of goods exported have been admitted virtually free of duty. That drawback has been an injustice to producers of such material in this country, but that injustice is as nothing compared with the injustice of admitting free of duty these so-called raw materials while maintaining duties upon the products in the manufacture of which they are used. Justice demands that either a protective tariff should protect all, or else that there should be no protective tariff.

RICHARD H. EDMONDS,
Editor MANUFACTURERS' RECORD.

GALVESTON, THE OPTIMIST.

In reply to a message of congratulation upon the escape of Galveston from disaster, Mayor Lewis Fisher telegraphed the MANUFACTURERS' RECORD as follows:

Accept thanks of the people of Galveston for your kind message. Our seawall has stood a severe test and its efficiency and stability is thoroughly demonstrated. Come and see us.

To the people of the country the following message was sent:

The city of Galveston sends greetings to her sister cities, the people of the United States and of the world, in that at this hour it has just passed through a most formidable storm, manifesting in its course some of the most violent incidents of cyclonic disturbances, and its great seawall has completely vindicated its efficiency and protected the city against dangers from the sea, leaving such insignificant damages as are incident to all storms.

The city's great business interests and its people have safely passed through a most severe hurricane. The seawall proved a complete success; the city's great wharves and shipping interests suffered no damage, and not a life was lost on the island.

LEWIS FISHER,
Mayor.
MACO STEWART,
President Security Building Co.
M. E. KLEBERG,
City Attorney.
V. E. AUSTIN,
Commissioner of Streets.
E. O. FLOOD,
President of the Chamber of Commerce.
B. ABOVE,
President of the Maritime Association.

Sensational reports last week more than justified this greeting. The magnificent courage shown by the people of Galveston at the time of its overwhelming in 1900 made an impression upon the country that can never be obliterated. It aroused more than usual interest in the fortunes of that Gulf port and in the work of its rehabilitation. Great relief was felt when it was known that the engineering problems for its protection had worked out through a strenuous test. On another page of this

issue of the MANUFACTURERS' RECORD Albert Phenix describes in entertaining manner the means which protected Galveston and sketches the possibilities in the future of the city.

W. B. Michael, superintendent of the Dover (N. J.) works of the Fitz-Hugh-Luther Company, railway equipment, New York city, writes to the MANUFACTURERS' RECORD:

We fully appreciate your publication, as it has been the means of securing for us considerable additional business. We will be

oped. That made the issue largely one of voters who owned sheep or wanted to own them and voters largely outnumbering the others, whose live-stock consisted principally of curs. It is obvious that under the circumstances cur owners were able to prevent legislation in behalf of sheep owners. But the opposition is likely to be divided by the new proposition of a dog tax for the support of common schools, because many cur owners are also child owners. It is difficult to conceive of any man's thinking more of his dog than of his child,

bales, an increase over the same period last year of 2,126,133 bales. The exports were 8,274,400 bales, an increase of 1,011,713 bales. The takings were, by Northern spinners, 2,644,282 bales, an increase of 779,079 bales; by Southern spinners, 2,381,033 bales, an increase of 218,044 bales.

THAT SOUTHERN ARCHITECTURAL MONUMENT.

Five months ago, it may be recalled, a million-dollar "Southern Architectural Monument" was to rise quickly, under the auspices of the Southern Commercial Congress, upon a site in Washington toward the \$511,000 purchase price of which \$50,000 had been paid, it was reported. It was expected that one thousand Southern men would each contribute \$1000 for the endowment fund of \$1,000,000 necessary to buy the site, erect the building and assure a pleasant life-nook for at least one individual, to say nothing of commissions possible in real-estate transactions. At the time Southern business men were given the opportunity to send to Washington for deposit to the account of the Southern Commercial Congress, which had not then a personality in law, a draft for \$250 and three notes for \$250 each, payable in three months, six months and nine months, respectively. In return for these four favors was to be sent a receipt, and ultimately, in exchange for this receipt, the makers of the drafts and the notes were not only to receive certificates of membership in the Southern Commercial Congress and in the Southern Club, which was proposed to be formed, but they were also to be bowled along the posterior corridors of time as patriots of purest ray serene. As the membership in the Southern Commercial Congress was to be devisable or transmissible by will or in some other proper manner, contingent, of course, upon one's letting loose that thousand dollars for the endowment fund, there was in the scheme the germ of another patriotic national body, the Sons and Daughters of the Original Members of the Southern Club of Washington, D. C.

The Southern Commercial Congress was to be an unincorporated enterprise, but its holding and investing end was to take the form of a joint stock company to be known as the Southern Commercial Congress Company under the laws of the District of Columbia, with a capital stock of not less than \$50,000 and not more than \$5,000,000. The one thousand Southern business men willing to contribute \$1000 each to such an enterprise have naturally not materialized. But the Southern Building Corporation has been formed and now it is announced that—

"The building and ground will cost \$1,500,000 and the stock of the building company will be sold throughout the Southern States."

It is also announced "officially" that—"General publicity work carried on by the Southern Commercial Congress for the benefit of all Southern States will go forward without cessation."

Regarding that "publicity work"—but why further comment?

CRY FROM MACEDONIA.

For the moment Britishers are bubbling with enthusiasm over Bleriot. However, as soon as the significance of Bleriot's aeroplane flight across the channel dawns upon the British mind one may expect another howl originating in Downing street about the blood-is-thicker-than-water relations of Great Britain and the United States and the necessity for "Anglo-Saxons" to stand together for the maintenance of civilization in the world. But England, in attempting again its cat's-paw policy, will miss Pauncefoot. Still, Wu-Ting-Fang is alive and active,

What is the Use of Discussing the Duty on Hides?

By B. N. Baker of Baltimore.

[Written for the Manufacturers' Record.]

FACTS.

The United States Government owns the Panama Steamship Company, from New York to Colon, and owns the Panama Railroad Company, from Colon to Panama, and operates them as commercial lines.

The Panama Steamship Company claims the right to regulate rates to and from Colon on account of the joint ownership of the Panama Steamship Company and Panama Railroad Company by the United States Government, War Department.

FACT.

The rate on hides from Central America to New York is \$30 a ton. The Pacific Coast Steamship Company, from Central America to Panama, receives \$12 a ton; the Panama Railroad Company, from Panama to Colon, receives \$8.10 a ton, and the Panama Steamship Company, from Colon to New York, receives \$9.90 a ton.

The rate on hides from Central America to Europe is \$24 a ton. The Pacific Coast Steamship Company, from Central America to Panama, receives \$8.40 a ton; the Panama Railroad Company, from Panama to Colon, receives \$5.60 a ton, and the Panama Steamship Line, from Colon to Europe, receives \$10 a ton.

RESULT.

An American importer pays the Panama Railroad Company, owned and operated by the United States Government, \$2.50 a ton more, if from Central America, and pays the Pacific Coast Steamship Company \$3.60 a ton more on hides than an English, French or German importer pays.

DISTANCES.

Colon to New York, 1981 miles; Colon to Liverpool, 4692 miles, and Colon to Hamburg, 4992 miles.

FACT.

The rate on hides from Guayaquil to New York is \$22.50 a ton. The Pacific Coast Steamship Company, from Guayaquil to Panama, receives \$8.55 a ton; the Panama Railroad Company, from Panama to Colon, receives \$6.28 a ton, and the Panama Steamship Company, from Colon to New York, receives \$7.67 a ton.

The rate on hides from Guayaquil to Europe is \$19.20 a ton. The Pacific Coast Steamship Company, from Guayaquil to Panama, receives \$6.40 a ton; the Panama Railroad Company, from Panama to Colon, receives \$4.80 a ton, and the Panama Steamship Line, from Colon to Europe, receives \$8 a ton.

RESULT.

An American importer pays the Panama Railroad Company, owned and operated by the United States Government, \$1.48 a ton more, if from Guayaquil, and pays the Pacific Coast Steamship Company \$2.15 a ton more on hides than an English, French or German importer pays.

REMARKS.

Let us spend millions more to build the Panama Canal and millions for its fortification, but not one dollar to develop the commercial interests of our country!

pleased to take advantage of your "Machinery Wanted" columns at any time we are in the market.

ANTI-DOG.

A new term has been given the agitation against superfluous dogs in the South in a bill introduced in the Georgia Legislature for the levying of a tax upon dogs, the proceeds of which are to be turned into the school funds of the several counties. Heretofore such proposed tax has usually looked to the elimination of worthless curs in order that sheep-raising might be devel-

so it is hoped that the bill may become a law and that Georgia may lead the way in a policy that will make the dogs of the State contribute to the welfare of the children of the State directly in swelling the school funds and indirectly in creating a great sheep-raising industry.

THE COTTON MOVEMENT.

In his report for July 23 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 326 days of the present season was 13,430,867

DEEP WATER AT BEAUMONT.

Enterprise of Citizens Assures a Commercial Improvement.

[Special Cor. Manufacturers' Record.]

Beaumont, Texas, July 22.

By a most overwhelming vote of 13 to 1, the people of Jefferson county have authorized the issuance of bonds to the amount of \$498,000 for the purpose of deepening the Sabine-Neches Canal and further improving the Neches River so as to enable ocean-going vessels to ply direct to Beaumont. In Beaumont only nine votes were cast against the proposition, which attests the unanimity of the progressive spirit for which Beaumont is famed. It was the same spirit that built the Beaumont of today and assures the greater Beaumont to be. It was the same pluck and enterprise that gave this county the splendid system of highways, the great irrigating canals that water thousands of acres of rich rice land that annually yields millions of dollars and gives profitable employment to thousands of people; that recently authorized the city authorities to construct a public wharf on the river front. It was another brilliant exemplification of the Beaumont spirit, which dared to do what the Federal Government has done for other cities and might have ultimately done for Beaumont.

The great possibilities for making Beaumont an important inland port have long been realized by some of the foremost and farsighted citizens. As a result of an effort in this direction an appropriation was secured to dig a canal along the west side of Sabine Lake and connecting the mouths of the Sabine and Neches rivers with the Gulf. This canal is now 100 feet wide and about 10 feet deep, permitting only light-draft vessels to pass through, but it has proved sufficient to suggest the great possibilities offered for the opening of another important artery of commerce and the development of the many and varied resources of this section.

Being unable to secure immediately a sufficient appropriation from the Federal Government, and realizing the danger of further delay, it was proposed that the people provide the funds for the improvements immediately necessary, and plans were quickly formulated. A law conveying the constitutional right to issue bonds by vote of the people was drawn by citizens of Beaumont, and has been enacted by the Texas Legislature. The National Congress has also granted the necessary permit to make the improvement, and now that the bonds have been authorized, it is expected that the actual work will begin without delay.

With the deepening of the canal and the improvement of the Neches River, which is already one of the best of navigable streams, Beaumont is destined to become an important inland port. A fresh-water port is always attractive to shipowners, and there is reason to believe that Beaumont will do a big shipping business by water as soon as the canal is deepened to such an extent as to enable ocean-going vessels to ply direct to this port. It is now proposed to deepen the canal to 25 feet. With slight improvement the Neches River is already deep enough. This river runs through vast forests of fine timber, and much of it can be floated or handled by barge to Beaumont, which is an ideal assembling point. Some idea of the possibilities of shipping business for the new port of Beaumont may be gleaned from figures showing the tonnage originating in the immediate vicinity of Beaumont and controlled by Beaumont people.

The Beaumont rice mills, which are among the largest in the world ship annually 350,000 bags of clean rice, each bag

weighing 100 pounds, or a total of 5,500,000 pounds. Beaumont lumber concerns ship annually 300,000,000 feet of pine and hardwood, or 900,000 tons. The Beaumont oil field has not gone dry by any manner of means, the production being something like 2,000,000 barrels per annum, while the total production of Southeast Texas is nearly 11,000,000 barrels. The great pipe lines from other oil fields in Texas, Oklahoma and Louisiana bring additional millions of barrels of oil to the great refineries at Beaumont, Port Arthur and Port Neches, which shipped over 8,000,000 barrels by vessel from Port Arthur and Sabine last year, which was less than in 1907 or 1906. This indicates oil tonnage beyond the ability of this writer to compute.

The great sulphur deposits are near Beaumont, and every day a long train of cars of sulphur passes through Beaumont to shipside at Sabine. To the north of Beaumont are the great iron fields of Texas, which must soon be developed, and here is the near and accessible port for handling this vast amount of tonnage. Indeed, it is expected that much of the iron ore will be milled at Beaumont or along the Neches River, where so many advantages are offered for industrial plants, cheap fuel, an inexhaustible supply of the finest steaming water, cheap and convenient shipping facilities forming a most attractive combination.

In a short time Beaumont will be able to ship her products to the ports of the world, and the location is especially advantageous for trade with the West Indies, Mexico and South America. The Beaumont Chamber of Commerce has already perfected arrangements for the establishment of a ship service between Beaumont and Mexican and Central American ports. It is also negotiating for the establishment of coastwise service between Beaumont and Galveston and Beaumont and New Orleans, and indications are favorable for the establishment of such service.

Push and energy is evidenced on every hand, and every day brings reports of new enterprises. A few days ago arrangements were perfected for the establishment of another woodworking plant to manufacture washboards, lawn swings, stepladders and similar articles, and giving employment to a large force of men. Beaumont will be the operating center for two other similar plants owned by the same company, one at Anniston, Ala., and another at Lancaster, Pa. During the past few days arrangements have also been made for the immediate erection of a large building to be occupied by a wholesale grocery store, and for a modern apartment-house. A company has been organized for the extensive distribution of pianos and other musical goods. The company will start with \$100,000 capital, and will handle the Texas business for some of the largest manufacturers in the country. The McFaddin-Wiess-Kyle rice mills will at once establish a department for putting unpolished rice on the market in one and three-pound packages. Scientists claim that in the process of polishing rice the most nutritious elements of the cereal are removed and much of the food value lost. A large sum will be invested in the new plant, which will give employment to a considerable operating force, and \$20,000 has been appropriated for advance advertising. At the beginning the plant will have a capacity of 50,000 packages per day, or about two carloads. Negotiations are also under way for the establishment of a large wagon factory that will give employment to 200 to 300 operatives and will utilize the hardwoods of this section.

T. W. LARKIN,

Secretary Chamber of Commerce.

LOOKING FOR IRON.

Representatives of the Middle West in Birmingham District.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., July 26.

Notwithstanding the fact that several large concerns in the Middle West have had their representatives in the district the past week looking for iron, few sales are reported. This is probably partly due to the fact that the makers refused to entertain offers for fourth quarter. In addition to the announcement that one large concern "deserted" the market during the week, still another important interest has practically sold what it terms its allotment for the third quarter, and will not consider fourth-quarter business. In all probability this means that by the first of the month this concern will also withdraw from the market and join the "happy waiting band." While the more conservative put the price at \$12.50 per ton, No. 2 foundry basis, there are some who demand an extra quarter for spot iron, making the base price \$12.75 per ton at the furnace. One sale of 1000 tons of No. 4 foundry for nearby shipment was made.

Repairs have been completed on the Alice furnace, and by the end of the coming week operations will be well under way. The chill molds have been removed from this plant.

The Williamson furnace has been thoroughly repaired, and at present is being dried out. Present indications are that it will be ready for blast about Monday next.

The Tennessee Company has double shifts at work on repairing No. 3 furnace at Bessemer, which was recently blown out. Notices of "laborers wanted" are hanging on the walls of the employment office of the company, and as fast as they can be obtained the mines and coke ovens are resuming operations. The mines at Wylam, the coke ovens at Ensley and Pratt City are being started as fast as conditions will admit. Additional ovens at John's mines are being fired, and other operations resuming along the line of the Birmingham Mineral. The Robertstown and Bessemer coke ovens are also going in. This means that the Birmingham Southern must have an eye to taking care of this increased business, and to that end it has not been asleep. It has received the balance of 175 steel-pressed dumps, and is turning out of its own shops at Pratt City about four gondolas a week. It has also made ample provision for its water supply, completing its dam at Lickton, with storage capacity of 50,000,000 gallons of water.

The local machine shops in the district report a somewhat healthier condition in their line, and within the past few days two representatives of a municipality in Kentucky visited one of the shops here for the purpose of ascertaining whether or not it was equipped to take care of a contract which it had been awarded by reason of being the lowest bidder. While the competition was keen, bids having been received from all over the country, the facilities and other conditions for handling the contract here were favorable.

The plant of the Central Foundry Co. at Anniston, which sustained heavy damages during the recent storms, has resumed operations with a full force of men employed.

Prices remain unchanged in the cast-iron pipe market, but the recent advance of \$1 per ton is well maintained, with tendency now toward still further advance shortly. Manufacturers are still receiving scattering orders for 500 to 1000-ton lots, and seem well satisfied to continue this way, and not confine sales further ahead than 60 days. Following are prices:

Four to six-inch water pipe, \$26 per ton at the foundry; 8 to 12-inch, \$25 per ton; over 12 inches, \$23 to \$24, with \$1 a ton extra for gas pipe.

The scrap-iron market continues firm, and there is no tendency to unload at a sacrifice. Quotations are as follows:

Old iron axles, \$14 to \$14.50.
Old iron rails, \$14 to \$14.50.
Old steel axles, \$12 to \$12.50.
No. 1 railroad wrought, \$12 to \$12.50.
No. 2 railroad wrought, \$10.50 to \$11.
No. 1 country, \$9.50 to \$10.
No. 2 country, \$9 to \$9.50.
Old steel rails, \$10 to \$11.
No. 1 machinery, \$10.50 to \$11.50.
No. 1 steel, \$10 to \$11.
Tram cars, \$10.50 to \$11.
Old standard car wheels, \$13 to \$13.50.
Light castings, stove plates, \$9 to \$9.50.
Mill cinders, cast borings, \$5 to \$5.50.

The announcement the past few days that the Southern Iron & Steel Co. had definitely decided to build an entirely new wire, rod and nail mill, of brick and steel-frame construction, at Alabama City, Ala., at a cost of \$750,000, and probably reaching the million-dollar mark, was encouraging news. The people of Gadsden raised \$150,000 and offered it as a bonus for the plant. The general offices of the company will be located in the Brown-Marx Building, Birmingham.

The Southern Iron & Steel Co. has started cleaning out Trussville furnace for relining, preparatory to blowing in as soon as possible, and it anticipates a daily output of from 175 to 200 tons of iron. Part of the bricks are already on hand. The superintendent of the wire nail and rod mill to be rebuilt at Gadsden is preparing the ground and the plans for the plant. The company's Altoona coal mines are in operation, and the Crudup mines are running at full blast stocking ore.

Our people are very much wrought up over the tariff agitation, and especially so in regard to the ore, coal and scrap-iron end of it.

Yesterday morning the washer and crusher plant of the Alabama Consolidated Coal & Iron Co. at Searles, Ala., was burned to the ground. In the bins were about 1200 tons of coal.

South African Trade.

Isaak Haarhoff & Son of Pretoria, South Africa, informs the MANUFACTURERS' RECORD that during the last calendar year British South Africa imported 682,103 hundredweight of iron, not including hardware, machinery, railway material, fencing and rope wire, valued at \$3,000,000, and 345,810 hundredweight of steel, valued at \$950,000, and paper valued at \$1,000,000, the value being in round numbers. The Pretoria firm suggests that there is great opportunity in South Africa for trade in such articles, and calls attention to a bonus offered by the Government on the finished products of iron and steel.

Moving to Texas.

A. E. West, Jr., vice-president of the Enid, Ochiltree & Western Railroad Co., writing from Dalhart, Texas, to the MANUFACTURERS' RECORD, says:

"New towns are being opened up and settlers coming in rapidly. Crops in counties to the east are the best in years, oats running as high as 100 bushels to the acre in Ochiltree county."

Want College Building Plans.

The trustees of the North Texas Normal College will receive bids until August 24 for the plans and specifications to construct a college building at a total cost of not more than \$35,000. Architects can obtain information by addressing J. T. Bottorff, secretary, Denton, Texas.

Virginia's Active Interest in Improved Highways.

By GOVERNOR CLAUDE A. SWANSON.

[Written for the Manufacturers' Record.]

I am in receipt of your letter of recent date, requesting me to furnish you a statement of the good-roads movement in Virginia, the work that has been done and the prospects for future improvement of the State highways.

In reply to this inquiry I will say that Virginia commenced her present movement for road improvement at the session of the General Assembly of 1906. Up to that time the State had done nothing toward either the construction or improvement of the highways. The matter had been left entirely to the counties and local authorities. The General Assembly of 1906 commenced this movement by creating a Highway Commission, with sufficient and competent assistants, who were authorized to make surveys and specifications for the counties and local authorities upon request, free of charges. It was thought best for the State not to make appropriations for road construction until the department had been organized and could see that the money was wisely and properly expended. The same session of the General Assembly passed a law directing the employment of all prisoners in the jails and convicts sent to the penitentiary for a term not exceeding two years, to be used upon the highways in improving and constructing them. The State appropriated sufficient money to guard, feed and clothe these prisoners, and the local authorities furnished the material and machinery to be used. Under the operation of this provision the State furnishes about half the cost of construction of the roads and the counties and local authorities the residue.

Heretofore the State had kept all prisoners in the jails in idleness, costing about 25 cents per capita to feed, clothe and guard them, and received nothing in return. Under the operation of this law the State has been able to feed, clothe and guard these prisoners for a great deal less than it cost to keep them in prison, and in addition secures their work on the public roads. The health and the moral and physical condition of the prisoners has been greatly improved while engaged in road building. A marked improvement in health has been noted. The camps have been constructed with the utmost regard for the laws of sanitation, and very little sickness has occurred among the prisoners. The success of the convict road forces has been marked, and shows results as beneficial as its most sanguine advocate could wish.

The last General Assembly increased the term of those sentenced to work on the roads to five years, and this will add largely to the force.

Under the operation of this law there are now 14 camps engaged in road work in the State. The demand for these camps is larger than the State can supply. The law will doubtless be amended at the next session of the General Assembly so as to provide for more camps and make it easier to obtain the jail prisoners.

When the last General Assembly met it was evident from the number of convicts available that a vast majority of the counties could not receive the benefits to be derived from this law; hence the General Assembly appropriated, commencing the 1st of March, 1909, \$250,000 out of the State treasury to be divided among the counties in proportion to the taxes paid by the counties, conditioned upon the counties or local authorities furnishing an amount equal to that furnished by the State, this amount to be available in those counties that could not obtain the benefit

of a road camp during the year; the roads to be constructed or improved to be under the direction of the Highway Commissioner, and according to his plans and specifications.

Where the amount furnished by the State was less than \$2500 the counties were permitted to use this in the construction of bridges, the county furnishing an amount equal to that furnished by the State; the location of the bridge to be determined by the State and county authorities, and the plans and specifications to be approved by the Highway Commissioner.

Under these two laws this year the State appropriation to the aid of road improvement is \$329,800. The results from the joint operation of these laws have been wonderful, and have given a great impetus to road improvement and construction.

All the counties in the State except 10 have availed themselves of the provisions of the law, and hence in all the counties except 10 there is at present either being constructed permanent roads or needed bridges. The advantage of this law is that it gives every county an object-lesson, enabling it to see the advantages accruing from the construction of good roads. Experience has shown that wherever an object-lesson of even a few miles of good road has been constructed it had been followed immediately by the construction of many additional miles and a great increase of interest in good highways.

Under the operation of these laws 130 miles of permanent road have been constructed within this State; 193 miles more are under contract and in process of construction. The roads constructed and those contracted for are of the best modern type. Arrangements have been made to begin at an early date the construction of 136 miles more, located in 26 different counties. Thus in a very short time, under the operation of these laws, Virginia will have constructed 459 miles of permanent road.

Surveys have been made for 141 miles more, which will soon be let to contract. Applications are pending before the Highway Commission for 138 miles to be surveyed for the purpose of construction. Thus in the near future Virginia will have under contract and in process of construction about 738 miles of permanent roads.

In addition to this, in nearly every county and section of the State there is manifested an intense interest in public roads. The citizens and local authorities are uniting to greatly increase the present amount of road improvement. Each day witnesses a great acceleration of the movement—more interest, more appropriation of money.

In addition to this the Highway Commission has prepared plans for many splendid iron bridges in 26 counties, the majority of which have been completed or are now under construction under this State aid.

The plan of road improvement and betterment in Virginia by the joint aid of State and local authorities has been productive of most beneficial results, and I am sure will be further extended by the next General Assembly.

The law provided that the money apportioned to each county can be used in payment of interest on bonds or for the retirement of the principal of the bonds issued for road betterment or construction, if so desired by the counties. Under this provision a county is enabled to issue bonds and then use the funds furnished by the State to pay the interest on the bonds

or as a sinking fund for the retirement of the bonds when due, the State paying half the interest and half the sinking fund. Under the operation of this law \$969,000 of bonds have been issued, and when disposed of will greatly increase the amount of road construction. The issue of bonds under this law would have been much larger but for some doubt as to the legality of certain provisions of the law governing bond issues in connection with the requirements of voters. This can be easily corrected at the next session of the General Assembly, and this provision of the law will doubtless be availed of by many counties.

The fight for good roads in Virginia has been won if the present earnest work and interest are continued, and neither the State nor local authorities will be so unwise as to venture in doubtful or risky experiments. The movement in Virginia has been marked by continuous improvement, because the laws have been practical and wise, and there has been no expenditure of money except that which could bring immediate beneficial results. Wild and hazardous schemes, which in the end must result in failure, can but result disastrously to the movement.

I hope the next General Assembly of Virginia will wisely and in a practical way continue and further increase the good work done by the last two General Assemblies, and if so Virginia will soon have a wonderful improvement of her public highways.

I favor the next General Assembly passing an act dedicating a certain amount derived from a specific source of revenue for the State aid to roads to be distributed and utilized under the present law. It would seem to me to be a wise provision for the State to pass an enactment pledging that in the future all money derived from the State taxation upon the physical

property of the railroads, amounting last year to \$289,262.36, should be used in the future for public highway improvement and construction and to be distributed among the counties and used as provided by the present laws. This would make the State aid permanent. The counties that think proper to issue bonds would then know what they could expect in the future from the State to pay interest and create a sinking fund, and could thus act wisely in regard to the issuance of bonds. This would also enable the counties that decided to issue bonds to sell the bonds easily and at reasonable prices, because the State had pledged a certain sum to pay the interest and create a sinking fund for retirement of the bonds. The counties that did not wish to issue bonds could use the fund for the construction and improvement of the roads. I believe the enactment of a law of this kind would give an immense impetus to road improvement in Virginia, and in a few years the State would be covered by splendid public highways. This plan is practical, prudent, and there would be no expenditure of money except for immediate and practical benefits. The revenue of the State is amply sufficient to justify this expenditure for public roads. Each year would witness (as the railroads increased in value and mileage) an increased amount available for road construction.

I believe a model system of road construction and improvement is to be found in a combination of Federal, State and local aid. The travel over the public highways is national, State and local. The expenditure of money for their improvement should be similar.

Virginia is fully awake to the importance, socially and economically, of good roads, and I fully expect to witness each year an increased interest in the construction of permanent public highways.

Richmond, Va., July 23.

Saved By Its Wonderful Concrete Seawall.

Galveston's Work of Faith Vindicated Under A Severe Test.

[Special Correspondence Manufacturers' Record.]

Galveston, Texas, July 24.

That the great concrete wall reaching its protecting length for four miles along the ocean side of Galveston city has alone prevented an appalling disaster to life and property is a fact so palpable as to find ready acceptance in the minds of everybody. A storm so severe as to cause nearly \$2,000,000 worth of damage and the loss of a score or more of lives along the Gulf coast pounded for hours upon the majestic Galveston seawall, and when it subsided there was no record of more than trifling damage to any buildings in the area of the seawall's protection, and not a single life was lost within the limits of the city.

No wonder Galveston's Mayor sent greetings to the world and jubilantly heralded fact that the test had come and the seawall had justified the expectations of its designers and the tremendous cost which the people had paid for the protection.

In the midst of the jubilation, nevertheless, there are those who question the severity of the test and indulge in speculation as to the outcome had the storm raged for two or three times the duration of the recent hurricane and had the wind reached the velocity of the 1900 storm, when the wind gauge blew away at the 120-mile reading. The skeptics were quite ready with "I-told-you-so's" when the first wild reports reached the interior to the effect that the seawall had failed in

its intended work of protection and that all Galveston was six or seven feet under water. It may be conceded at once that given the identical conditions of the storm of September, 1900, the test would have been a much severer one than the storm of Wednesday afforded, but the overwhelming fact remains that the seawall saved the day; did exactly what it was expected to do, and that without it the seas would have flooded the city and undermined houses, which the wind would have pounded together to destruction and in the flood and wreckage great loss of life would have been the inevitable result.

And it is necessary to remember that plans for the seawall were laid with the force of wind and height of wave of the 1900 storm in immediate mind, and in the construction of the wall and the filling in of over half the city to a higher grade it was announced that "when the contractors finally quit, Galveston will be above the highest flood line and its safety as secure as the best science can make it."

In the storm of Wednesday bathhouses on the beach were wrecked and their timbers were pounded against the seawall until they were reduced to kindling wood, which the spray threw up in piles along the seawall and roadway. Occasionally waves of greater height would toss a huge timber or a drifting log over the top of the wall and deposit it anywhere from the water side to 20 feet inland, but the conditions are well illustrated by the fact that hundreds of sightseers thronged the wall during the storm, and from the vant-

age ground of pillars and electric-light poles were unharmed by wind or wave.

For 20 hours the water was over the foot of the seawall, and there was enough water blown over the wall in this time to saturate parts of the island. That it was no ordinary blow is evidenced by the fact that almost the entire iron railing along the apex of the seawall was blown down, most of the uprights being broken off at the plates, but in some instances the bolts themselves being torn out of the grouting in the concrete.

Thus there is ample evidence that the test was an extraordinarily severe one, and an examination of the seawall demonstrates that in all essentials it came through unscathed.

Pessimists and doubters there are on every possible subject relating to the here or hereafter. Some of these have conceded the sufficiency of the wall as a protection, "provided it sticks." Such have pointed out that there is an ever-present danger of the sand under the wall being washed out, with the consequent destruction of the seawall by undermining. Those informed dismiss the suggestion as solely due to ignorance of the seawall's construction. In this connection it may be well to recall that the foundation rests on four rows of round piling 12 inches in diameter, driven four feet apart, and extending down 44 feet into clay. There is also a row of sheet piling just inside the outer row of round piling, driven into the ground 26 feet below mean low tide, for the express purpose of preventing undermining. Furthermore, all along the base of the concave seawall front there are gigantic blocks of granite riprapping, 100,000 tons in all, making a protecting apron 27 feet wide and four feet in thickness, and it is pointed out that even should there be any washing out of sand in the direction of undermining—a contingency which is considered of the remotest—the granite riprapping would drop into the cavity and prevent any serious inroads.

The four-mile seawall has its top 17 feet above mean low tide. It is 16 feet wide at the base and 5 feet at the apex. It is of solid reinforced concrete, in which crushed granite was used, and the reinforcement is of heavy steel rods nine feet in length, placed in the wall every three feet. Ten carloads of reinforcing rods were used and 150,000 tons of concrete, in which there were 50,000 tons of sand and 27,000 tons of cement. There were 18,000 round piles used in the foundation and 4,000,000 feet of sheet piling.

Eminent engineers were in charge of the plans and the construction, and Galveston feels that her faith in their ability and her own heroism in levying the enormous tax on the people which the undertaking involved have been amply justified in the immunity just received, and she furthermore has entire faith against any serious disaster from storm loss in the future. Serenity describes the attitude of her men of affairs, and the way she came through the storm is regarded as the best and greatest advertisement Galveston could possibly have been given.

She is going ahead with her great undertakings without any interruption having occurred, and with even a larger faith in the continued growth and importance of the city as one of the great ports of the world. Work on the giant causeway connecting the island with the mainland is already under way, and this million-and-a-half-dollar improvement, which will provide a solid concrete roadway for railroads, wagons, interurban car line and foot passengers, as well as carrying the mains supplying the city with water, will be completed, according to contract, in December, 1910. Already the city and contiguous territory are alike feeling the ef-

fects of this contemplated improvement. The interurban car line is closely identified with the causeway development. It was, of course, impossible of construction without a bridge across the inlet, but will be completed between Galveston and Houston coincident with the opening of the causeway to traffic.

This will give ready access to Galveston from every point along the line, and will practically put Galveston on the mainland. Since the destruction of the old wagon road by the storm of 1900 there has been no wagon driven into Galveston from the mainland, and the single railroad bridge was the only means of transportation between the island and the outside world, save through boats. That the city has grown with so great a percentage of increase and that the mainland adjacent has not retrograded may well be the occasion of surprise. Under the stimulating influence of the causeway's early completion lands in the territory to be served by the interurban line are being bought up in 10, 20 and 40-acre tracts, and the great development of a truck and fruit-growing industry is assured.

Galveston itself will be wonderfully benefited by the quickened flow of passenger and commercial traffic which the interurban line and the wagon road will bring, and with the improved facilities for easy access and egress there should be an excursion business into Galveston during the greater portion of the year of proportions sufficient to duplicate in some degree at least the development that has occurred in Atlantic City. For nowhere in the South is there a beach approaching the attractiveness of Galveston, with its almost unparalleled velvety softness and gentle slope to the sea, and nowhere South is there to be found such a combination as is here of populous city and bathing beach in its front-door yard.

At this time and in this connection there may be added force to the query of some years as to what is to be the future of this town that Galvez, the Spaniard from New Orleans, founded in the century before the last; this storm-stressed and time-tried furthest outpost of any seaport that courts the trade of the Caribbean Sea; this whilom home of the pirate Lafitte and oftentimes convenient refuge of the buccaneers of the ancient Spanish Main; this city of later splendor, with its multitude of merchant princes and captains of finance and trade; only second today as an export port among the cities of America; the only port of the South right on the sea, where ocean-going vessels of the largest class come into their docks under their own steam; the terminal point of most of the railroads that carry the trade of the entire trans-Mississippi territory, can Galveston be prevented from becoming a really great city, or is she doomed to be the dooryard of a metropolis elsewhere, the mere funnel of a business that ebbs and flows out to and from all the world without touching and vitalizing this medium of contact?

There is no unanimous opinion on the subject either way, even among the people of Galveston. While some enthusiasts foresee the time when there will be a million people in the Galveston district, which is made to include the city on the island and those now building at Bolivar Point and Texas City, and are counting on a development along Buffalo Bayou that will make an almost unbroken community from Houston to the bay, others consider such prophecies mere idle dreams and are convinced that Galveston must remain content with a slow and modest growth; a position as a port with little profit locally in the cargoes shipped out and in, and as a pleasant summer resort town and playground for the people

of the State. Such as they see no prospects of payrolls, with fuel high and no extensive population of laboring people to draw on were industrial enterprises to be contemplated, and they seem reconciled, as to an inexorable decree, to the loss from Galveston of the greater part of the jobbing trade that she once possessed.

While the enthusiasm that gives to Galveston anything like a million population in the shortly coming years may be somewhat overwrought, it seems to me, from a survey of the field, that the optimists have the better side of the argument. While in matter of growth Galveston would seem to have lagged behind all the progressive cities of the State, she has, as it seems to me, done amazing well to get back to the population she had before some 8000 of her citizens were destroyed by the storm.

It must be remembered that fully 10,000 people moved away from Galveston after the storm, so that in 1901 the population is considered to have dwindled to about 20,000. With an estimated population today of 40,000, it will be seen that the percentage of growth for eight years has been 100 per cent., which is of significance and importance to a degree, and everything considered it may not be beside the fact to conceive that Galveston is just now prepared for a long leap and a swinging stride to the fore.

It was a work of marvelous heroism for these people to pull themselves together after the appalling losses of the 1900 storm. On top of the irreparable loss of lives and the enormous loss of every kind of property, there has been a further gigantic burden of taxation on the people to not only restore the city to its former conditions for carrying on trade and as a place of habitation, but to provide protection against future storms.

The \$4,000,000 or so that this is costing the taxpayers of the city and county is but the beginning of the expense involved. It was necessary to raise 1000 houses, some of them as much as 12 or 14 feet, all of which had to be paid for by the individual. Nor was this expense much more than a starter; not only was new fencing required, but in all the area affected new sidewalks, new street paving and new sewers will have to be put in, and finally, every vestige of verdure, all the fine old trees, palms, vines, shrubs and flowers, and the grass itself, in the area filled in or touched by the salt water pumped in by suction dredge from the bay with the sand used to raising the grade has been killed to the very tip of the roots. Figures are impossible to obtain, but estimates by some of those who have had occasion to look into the matter somewhat closely are to the effect that probably all of \$25,000,000 will be required to pay all the bills the restoration and protection will involve.

Necessarily, not all of this work can be done at once, nor paid for for some time; but that most urgent has been taken care of, and the city is getting in shape to push developments and improvements with the greatest possible diligence. There is yet very much to do, both in a public and in a private way, but not until the burdens of taking care of immediate necessities have been somewhat lifted will the people have appetite for taking hold of such enterprises as are nevertheless and quite palpably needed, like new and modern hotels, for instance, and better store and office buildings. Here would appear to be occasion for the activities of some of the 20 or more millionaires who live in Galveston and who made their money here in times past, but who are now frequently to be found in innocuous retirement.

What Galveston has so splendidly performed in recent years could not have been accomplished, however, without a citizen-

ship of alert, responsible and daring business men with a genius for doing things. Galveston is already reaching out for the trade of the Central American States, and relations of the most favorable sort are being established with those countries.

Galveston's shipping covers the globe, and with a present 30-foot channel it is the expectation that by the time the extension of the jetty work under way is completed a 35-foot channel will be the result.

As to what may be expected here in the way of the development of manufacturing, there are those who maintain that with proper effort a very considerable industrial growth may be brought about. As ships now come in ballast, practically, and without cargoes, it is maintained that an import trade in raw material of many kinds, to be manufactured here, is entirely feasible. That the railroads ought to become interested in the development of local industries is indicated in the fact that miles of empty cars go North from Galveston every year. It is maintained that the manufacture of bagging and the products of sisal, hemp, manila and fine cotton goods should be practicable here as a starter, with the inevitable result that other industries would develop collaterally and in consequence, as is always the case everywhere a start is made.

While there may be labor conditions which would necessitate an adjustment to factory conditions and requirements, as men are affected by the fact that they do not have to work here as they do under the stress of climatic conditions in the North, and the farms, with their comfortable wages, are a very pleasant refuge, yet there is still a big population here of boys and girls who would like to work, and parents who have an appreciation of the comforts the entire household might enjoy from a materially increased family income. And labor here is described as of a high class, as a rule.

Texas and the middle West needs all the facilities for ocean commerce that Galveston contains or can provide. There will be an overflow of business in the fast coming years, and for this there must be facilities provided at Texas City, Bolivar Point and numerous places on the Buffalo Bayou, or the Houston-Galveston ship channel, as it is now called. With the development of Texas and contiguous territory, now only just well begun, there will be needed every facility that the situation affords. The Galveston-Houston district is essentially one in interest and destiny. Galveston is vitally essential to the developments that are to occur, and I feel wholly justified in predicting her continued prosperity and tremendous future growth.

ALBERT PHENIX.

Wishes to Buy Two Steamers.

A letter from Newport, Ark., says: "The second of the White River Transportation lines is now in process of organization. About three weeks ago the White & Black River Transportation Co. filed its papers. The three boats run by this company are operated entirely on the upper part of the river and in the timber business; their southern terminus is Newport. The White and Black River Packet Line is being incorporated to do a general freight and passenger business, to make all river points and to connect with the Little Rock packets at the mouth of White River. The second of these companies is now in the market for two light draft river steamers."

In the four years just ended, according to a census of the Chamber of Commerce, \$8,157,791 were added to investments in industrial enterprises at Dallas, Texas, bringing the total to \$19,556,870, with an annual output of \$42,738,615.

IN NORTHWESTERN ALABAMA.

Where Progress and Opportunity Are Coupled.

There is a territory in Northwestern Alabama which deserves a good deal more attention than it has probably received in the past. This is the territory largely included in the counties of Walker, Winston, Marion, Franklin, Lawrence and Colbert. The Northern Alabama Railway, of the Southern Railway system, is the railway outlet for the greater part of this region, though it is tapped at the north by the Memphis division of the Southern, and in Walker county by the Southern and the Frisco, while the Illinois Central from Corinth to Haleyville cuts through a portion of Marion county. Recent reports from the region and investigations lately made show that all through the section, which is naturally very rich, and which possesses undeveloped opportunities of many kinds, has taken on new energy and is making splendid progress along many lines. At the south end of this region are the great Walker county coal deposits of the Warrior field, at the north end the extensive brown hematite fields of Franklin county, and all through the territory are splendid areas of pine and hardwood timbers, with splendid farming and fruit-growing lands. Strategically its position is unusually fine, with the great Birmingham development at one end and the three Tennessee River cities of Sheffield, Florence and Tuscumbia at the other.

The towns and villages, Jasper, Haleyville, Russellville and smaller places, are steadily improving. Their people seem to be wisely laying the foundation for the steady and substantial growth which will come with the fuller development of the region. At Jasper there was completed this year a magnificent courthouse of Georgia marble, at a cost of \$150,000, one which in beauty can hardly be surpassed; extensive street improvements have been made and building operations have been on a liberal scale. A better class of buildings, both business and residence, are being erected than ever before. Haleyville has erected a large number of fine business structures within the past two years, during which the town has doubled in population. At Russellville, a good portion of whose business district was burned in 1908, the character of the new buildings which have replaced those destroyed is far above the average found in the town or small city. The construction of better streets, the building of sidewalks and of sewers evince the progress of these and other places. There has been a distinct advance in the character of school buildings and the work of the public schools throughout the whole region. Jasper not long ago built a good grade school building, and only a few days ago voted bonds for a commodious high-school structure. At Russellville the Franklin high school was recently completed. The returns show a large amount of money spent during the past 18 months on rural schools and the extension of the school year, with greater attention on the part of the people to the efficiency of the instruction. For the first time in its history all of the 40 school districts in Franklin county are now provided with good school buildings. The question of building improved highways is being agitated in all the region. Walker county will probably soon vote on the issue of \$250,000 for macadamized roads, and the subject is a live one in Franklin county.

Few people understand how wonderful the natural wealth of these counties is. The coal measures practically cover all of the 824 square miles of Walker county, and extend over parts of Winston and Marion. A conservative estimate by the State

geologist of Alabama puts the coal deposits of Walker at 5,000,000,000 tons, or more than equal to the present production of all Alabama mines for 350 years. The highest production of Walker mines yet reached was in 1907, when 3,244,000 tons were mined. The mines around Jasper, at Cordova, Oakman, Corona, Patton, Parrish and other points are all now running large forces of men, and the opening of new mines is contemplated. There is a proposition to build a belt line to connect the Black Crow Coal Co.'s property, on the Frisco road, and other properties with Jasper, and with the Southern and Northern Alabama roads.

Rich as Walker county is in coal measures, it is little, if any, better favored by nature than Franklin county, with its brown-ore deposits, which are said to extend over 46,000 acres. As yet companies owning ore lands have developed but a very limited area. Only two companies have so far mined ore in this field, and both of their mines were closed down during the financial depression. The Sloss-Sheffield Company is again shipping ore to its Sheffield and Birmingham furnaces, sending out about 1000 tons a day. The Sheffield Coal & Iron Co. is now placing its mines in shape to resume shipments. It will ship about 500 tons daily at the opening. Within the last six or eight months considerable activity has been shown in ore lands. The Russellville Iron Ore & Metal Co., a new corporation in which are Birmingham and other investors, has purchased several hundred acres of ore property immediately adjoining the western limits of the town. A syndicate headed by the McCormicks of Harrisburg, Pa., has bought 1000 acres a few miles farther west.

The Rockwood quarries, reached by a spur track from Darlington station, have been consolidated and passed into the hands of the Foster, Creighton & Gould Company. These quarries are now shipping quantities of building stone and about 600 tons of flux daily.

Along the line of the Northern Alabama several new sawmills and woodworking plants have either recently been built or located. The latest is a hub and spoke factory, for which a site has been secured at Jasper.

The agricultural development of this region is noticeable. The main products of the region have been corn and cotton, though some wheat has been produced, a little attention paid to stock and poultry, and crops of fruit and vegetables, with now and then a field of tobacco for home use, have been grown. The value of the section as an agricultural region has perhaps never been understood, and for this reason Northwest Alabama has remained one of the least developed portions of the South. The varied soils are nearly all productive. The valley lands are first-class, and the hill lands, with their gravelly soil, are now recognized as unusually fine for fruit. Within the past five years there has been into the region a movement by farmers and fruit growers from Georgia and other States, with a few from the North. These people have largely bought the low-priced farms. At many points they have made some of the best improved places in the South. While the country is elevated, a spur of the Sand Mountains, and often broken, the large proportion of the entire region, probably 80 per cent., lies so it can be farmed to advantage. It is a remarkable fact that in this territory, a few miles from the railroad, good lands can still be purchased at from \$2 to \$5 an acre, while adjacent to the towns and the railroad improved and partially improved farms can be had at from \$8 to \$25, and these are lands which are very productive. With diversified

farming the region will be one of the most prosperous agricultural territories in the whole South. For one thing, it is a good grass country, and many of the lands make fine crops of hay. There are few sections whose climate is more favorable to agriculture or fruit-growing, few so well watered. Streams are abundant, and springs are found everywhere throughout the whole region. It is said there is not a single 40-acre tract in all Winston county without one or more large springs. Though no particular attention is paid to stock and poultry, Jasper, Russellville and other places ship very considerable quantities every year. Russellville now ships poultry to Memphis, Nashville, Birmingham, New Orleans, Mobile and Tampa.

The most conspicuous development of the past few years has been in fruit and truck growing. Five years ago small commercial orchards were set out, and each year since there have been additions. This year the first car lots of peaches and potatoes were sent to Northern markets. With Haleyville as a center, this region has now about 200,000 peach trees and a number of apple orchards, and this coming season there will be set out, under the supervision of the Western Alabama Fruit and Vegetable Growers' Association, about 250,000 additional trees, and a large acreage will be planted in potatoes, tomatoes and cantaloupes. For many years peaches have been grown here, and practically without a failure in the crop. This year, while nearly all other peach districts in the country had small yields, there was a full crop here.

Along with the fruit and truck industry, the canning industry has been introduced. There has been built at Haleyville a plant, which is now in operation, and another is under construction at Phil Campbell.

In Walker county and in other communities in this region model farm plots, devoted to cotton and corn, are being cultivated this year under the direction of the United States Department of Agriculture. One of the best evidences of the future development of the territory is the fact that the farmers are anxious to adopt improved methods of agriculture.

INTO THE COAL FIELDS.

Railroad Acquisitions and Plans for Extensions in Kentucky.

[Special Cor. Manufacturers' Record.]

Barboursville, Ky., July 26.

A deal of importance to the coal development industry in this section of the Kentucky-Tennessee-Virginia fields was the purchase of the Straight Creek Railroad, in Bell county, by the Louisville & Nashville Railroad. By this deal the Louisville & Nashville comes into possession of all of the Straight Creek Railroad extensions except the extension up the left fork of Straight Creek, that line being owned by different coal companies.

The Straight Creek Railroad for several years has been one of the most important "feeders" to the Louisville & Nashville in the coal fields. Some of the largest mines in the State are located up the valley of Straight Creek, and a large tonnage is drawn from that section. The Louisville & Nashville, it is stated, will immediately make extensions of the line up the right fork and open a valuable undeveloped field which has been in possession of coal operators for some time. Engineers are now in the field making surveys, and it is probable that the work of extending the line will be started at an early date.

The Straight Creek field is now largely under development by Kentucky capitalists. The district is located in Bell county, and the various mines have had an excellent business this summer, taking into consideration the low stage of the coal mar-

ket and the general industrial depression.

A valuable railroad extension, about which little is generally known, is now in course of construction up the Cumberland River Valley into Harlan county coal fields, Southeastern Kentucky. This line, known as the Wasioto & Black Mountain Railroad, branches from the Louisville & Nashville at Wasioto, Bell county, and when completed will extend 18 or 20 miles. About half the line is complete, and the work of building the remainder is progressing satisfactorily.

Harlan county, Kentucky, is one of the richest sections of the South in coal deposits, but no railroad has yet been extended into that section because of geographical conditions. The prospects are now bright for an early development of the vast coal fields of the Black Mountain territory, the Wasioto & Black Mountain extension being only one of a number of projects designed with a view to opening the coal resources of the county. Some years ago a survey was made for a railroad from a point on the Chesapeake & Ohio, in the Big Sandy Valley, through the Pound Gap region into upper Harlan county, coming down Poor fork and opening that territory from the north. This week a party of engineers is going over this old route, and it is stated that estimates will now be made regarding the cost of making this extension.

While railroad extensions are being surveyed into undeveloped regions coal operators in the established fields of both Kentucky and Virginia have been hard hit by the prevailing dullness in the coal trade. The operator who has kept his plant in operation without interruption this summer is an exception. Most of the mines have been idle a part of the time, and in a few instances some have closed altogether. The Virginia operators and those on the Tennessee side, generally speaking, have been more fortunate than the Kentucky operators. On the Kentucky side a large part of the production is marketed for domestic purposes, while much of the Tennessee and Virginia product is used for steam and coke. The Claiborne county (Tennessee) mines, centered in the Mingo Hollow district, are now having a fair run, and conditions are improving. At the big Virginia plants, especially in the Stonega and Appalachia districts, normal conditions are gradually returning, and Kentucky operators report some improvement. It is believed that the worst stage has been passed, and a general increase in tonnage, with gradually increasing prices, seem to bear out the opinion.

W. S. HUDSON.

CUT-OVER PINE LANDS.

Their Availability for Crops in South Mississippi.

[Special Cor. Manufacturers' Record.]

Wilmer, Ala., July 26.

The pine belt lands of South Mississippi are capable of producing crops that are far more profitable than cotton. There are two food crops that grow to perfection on these lands, and when their merits are once recognized by the "insatiable" North and West, none will be left for the Mississippians. I refer to the "yams" and the fancy ribbon cane syrup. The following prose ode to the "yam," written by a Northern gentleman and clipped by the Mobile Register from the St. Louis Globe-Democrat, serves to show how this popular product is appreciated when its merits have been tried:

"But Atlanta is not wholly and suddenly a replica of other metropolises. It has something no Northern city has; it has yam pie. Go put the much-vaunted pumpkin pie on the farthest and most obscure shelf in the buttry. When once yam pie sets forth on its triumphant

Alexandrian tour of world conquest the pumpkin pie will realize the feebleness of its long overestimated charms. Why the yam has been kept in seclusion, buried alive by the inhabitants of South Carolina and Georgia, where it flourishes in its chosen and grateful soil and its virtues and glories have remained unsung either by Uncle Remus or Frank Stanton, can be accounted for only through a conspiracy. If the Georgia yam is ever discovered by the greedy and insatiable North, none will be left for the Georgians. Not only in the fragrant pies, all golden brown, does it appeal to the soul of man, but in every other form—boiled, baked, stewed, mashed and 'candied.' Why the Creator wasted any time on sweet potatoes after He had once turned forth such a masterpiece as the yam is one of those infinite mysteries not given to us to know."

The writer has long contended that were the Northern farmer able to produce this crop the Southerners, though living in a section where it "flourishes in its chosen and grateful soil," would be buying it in car lots manufactured into some form of breakfast food or table delicacy. As stated above, all that is required to have its merits recognized is to have it "discovered" by the "insatiable North," put in some large steam canneries and get in a class of farmers that appreciate a "good thing" when they see it. To illustrate the possibilities of this crop, the writer has often seen as much as 400 bushels of yams produced from one acre of land, and 300 bushels is considered only a fair average crop. In one instance, near Lucedale, Miss., last fall one farmer harvested at the rate of 650 bushels per acre. As to profits in canning the yam, one bushel will pack from 23 to 25 No. 2 cans; the farmer would gladly contract to furnish these yams at 50 cents per bushel delivered at cannery; No. 3 canned yams are worth today 80 cents per dozen f. o. b. shipping point; figure out the profits for yourself.

What is true of the yam is also applicable to the ribbon cane syrup industry, if properly managed, in this section. According to reports of the Agricultural Department at Washington, canes grown upon the pine lands of the South are 20 per cent. richer in saccharine matter than that grown upon the heavy black lands of Louisiana. When it is understood that there are no large steam mills operating in this section, and the old crude and wasteful method, the pine-knot evaporator and the one-mule mill, is still practiced, and when it is known that even though manufactured in this primitive fashion, a yield of from 400 to 600 gallons per acre is common, the possibilities of this crop will be better understood. Again, according to the same authority, by actual field tests behind the horse-power mills, it is claimed that by this method only about 70 per cent. of the juice is expressed from the canes, the balance, or 30 per cent., being wasted. Had our St. Louis friend "discovered" a sample of the fancy table syrup made even in this crude and wasteful way, his ode to the "cane" would have been fully equal to that of his to the "yam."

What this section needs to make it blossom like the rose and to develop its latent resources is, along with a thrifty class of farmers, men of capital who will erect large steam cane mills and potato canneries combined, and buy of the farmer his raw material at a price both profitable to grower and manufacturer alike, make a uniform grade of goods and introduce them on the great Northern markets; go into the large cities and give public demonstrations of the merits of the goods. There need be no fear of the results. With a section where a man may work every day

in the year, so far as climatic conditions are concerned, blessed with an abundance of pure water, plenty of fuel, where irrigation is not needed to produce bountiful crops, it is strange that so many people seeking homes in the South will overlook all these advantages. But it is only a question of time when the merits of the pine belt section of South Mississippi will be fully recognized. That which afforded a livelihood for the natives in the past is fast disappearing, and soon only blackened heaps of sawdust will remain, a reminder of conditions that were. But the passing of the stately pine will also see the passing of the little cabin, with its nomadic occupant, living here today, elsewhere tomorrow, not having a fixed abode long enough to establish schools or churches, occupying the land but not tilling it. But the soil denuded will be clothed again. Instead of the stately pine, we will have the fruit tree and the vine, and instead of the sage field, green fields and luxuriant vegetation. Stately farmhouses will replace the cabin, and churches and school-houses will minister to our spiritual and temporal welfare. Then, and not until then, will the South be not considered poor and ignorant.

H. H. BOLTON,
Immigration Agent Mobile, Jackson & Kansas City Railroad Co.

Alabama Association.

President John Craft and Secretary J. A. Rountree have issued a call for the annual meeting of Alabama Good Roads Association at Birmingham, October 14 and 15. The membership of the association is composed of the probate judges, county commissioners and boards of revenue of each of the 67 counties of Alabama, together with 12 delegates from each county appointed by the probate judges. Every mayor in the State has been invited to attend, and the commercial bodies have been requested to send delegates. The meeting promises to be largely attended, and over 2000 delegates are expected to be present. The Board of Trade of Birmingham invited the association to convene in Birmingham, and it is arranging all the details to make the meeting a great one. The convention promises to accomplish much good for the advancement of good roads in Alabama. Distinguished speakers and advocates of good roads of national reputation are expected to be in attendance. The officers of the association are John Craft, president, Mobile; W. M. Drennen, vice-president, Birmingham; J. A. Rountree, secretary-treasurer, Birmingham; John Craft, W. M. Drennen, J. A. Rountree, H. K. Milner, Hawthorn; Samuel Jenkins, Bay Minette; H. M. Wilson, Opelika; V. B. Atkins, Selma; J. W. Overton, Wetlowee; J. H. Bankhead, Jasper; R. A. Mitchell, Gadsden; Wm. E. Skeggs, Decatur, and Oscar Underwood, Birmingham, executive committee.

New York—Atlanta.

The route for the good road and reliability automobile run from New York to Atlanta in October has been announced as follows: Leave New York, pass through Perth Amboy, Philadelphia, Gettysburg, Lexington, Roanoke, Greensboro or Winston-Salem, Salisbury, Charlotte, Spartanburg, Greenville and to Atlanta. The distance is 1135 miles.

Upon 100 acres of sand hill land near Darlington, S. C., costing \$4 per acre, L. E. Carrigan has 1600 peach trees, yielding on an average from \$7.50 to \$15 each.

The Association of Texas Mayors elected last week. W. D. Davis of Fort Worth, president; C. N. Baldwin of Stephenville, first vice-president, and J. T. Lacy of Farmersville, secretary and treasurer.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Elizabethton, Tenn. — City; \$30,000 bonds for streets and sewers.
Newbury, S. C. — City; \$300,000 bonds for road construction.

Bonds to Be Voted.

Key West, Fla. — City will vote bonds for street paving.
Mulkey, Okla. — Wilson township of Carter county; \$10,000 bonds for road construction.
Spartanburg, S. C. — Spartanburg county, \$400,000 bonds for road construction.

Contracts Awarded.

Bessemer, Ala. — City awarded contract to C. M. Burkhalter & Co., Birmingham, for sidewalk, curbing, etc., to cost \$3700.
Chattanooga, Tenn. — Noll Construction Co. lowest bidder at \$200,000 for constructing five miles of chert roadway with cement curbs and gutters.
Gadsden, Ala. — City awarded contract to Graves-Matthews Paving Co. at \$41,040 for 22,000 yards granite curbing and at \$40,128 for concrete curbing.
Lexington, Ky. — City awarded contract to C. C. Miller & Co., Latonia, Ky., to pave North Limestone street with brick and pitch filler.
New Orleans, La. — W. H. Douglas lowest bidder at \$5000 for paving Charters street.
Sanford, N. C. — City awarded contract to Grantham & Sutton, Greensboro, N. C., for constructing concrete sidewalks.
Towson, Md. — Baltimore County Commissioners awarded contract to P. Flannigan & Sons, Baltimore, to pave 1st street in Canton with vitrified brick on concrete base.

Contracts to Be Awarded.

Atlanta, Ga. — City opens bids August 9 for paving Decatur street with wood block.
Atlanta, Ga. — City opens bids August 9 for 22,000 square yards of paving with wooden blocks on concrete foundation on Decatur street; also 23,000 square yards of same materials on Madison avenue.
Baltimore, Md. — City opens bids August 4 for grading, curbing and paving Stag alley with vitrified blocks.
Beaumont, Texas. — City opens bids August 3 for 4120 square yards vitrified brick paving and 2873 linear feet concrete curbing.
England, Ark. — City opened bids during the week for eight miles of concrete sidewalks.

Franklin, La. — City opens bids August 5 for constructing 65,000 square feet cement sidewalks and 32,500 square feet brick curbing.

Greensboro, N. C. — Guilford county will macadamize 16 miles of road.

Jonesboro, Ark. — City will expend \$76,000 for street paving.

Louisville, Ky. — Board of Public Works opens bids August 5 for vitrified brick paving and guttering costing \$5000 on certain streets.

Marianna, Ark. — City opens bids August 5 for 13,400 square yards vitrified block paving on concrete base and 4000 linear feet concrete curb.

Memphis, Tenn. — City opens bids today for paving several streets.

Montgomery, Ala. — City opens bids August 2 for paving various streets at a cost of \$56,450.

Nashville, Tenn. — Board of Public

Works will award contract for laying 2000 square yards granitoid sidewalks.

New Orleans, La. — City opened bids July 27 for paving City Park avenue with mineral rubber asphalt; estimated cost \$175,000.

North Birmingham, Ala. — City opened bids July 27 for grading, macadamizing, laying concrete sidewalks and gutters, etc., on certain streets.

Pensacola, Fla. — City opened bids July 27 for construction of clay and cinder roads.

Portsmouth, Va. — City opens bids August 5 for constructing 435 square yards concrete sidewalks and 1100 square yards granite block gutters.

Richmond, Va. — State Highway Commissioners open bids August 3 for constructing two miles of macadam.

Tulsa, Okla. — City Commissioners open bids August 2 for 43,000 yards or 39 blocks of asphalt or bitulithic paving.

Vicksburg, Miss. — City opens bids September 6 for paving Cherry street with asphalt, bitulithic or other material.

West Blocton, Ala. — City opens bids July 30 for certain grading, curbing, macadamizing and brick gutters.

By Individual Enterprise.

James S. Sexton, Hazelhurst, Miss., writing to the MANUFACTURERS' RECORD in reference to plans for building a good road from the town of Hazelhurst to the Rockport road, some four miles east of that place, says:

"This is an individual enterprise growing out of the desire of the people living upon the Georgetown public road in this county to have a first-class road for the benefit of the public and for their own convenience. We estimate that it will take about \$2500 to do the work, and we expect that amount to be raised in the main by private subscription, though we expect some assistance from the county and the town of Hazelhurst. The plan is to put the dirt road, which has a clay foundation, in perfect condition and to place thereon a coat of clean gravel not less than six inches thick. This gravel consists of small rocks, and is found in abundance along the line of the road, and when it is spread on the clay roadbed experience has demonstrated that it lasts indefinitely and makes a delightful road."

Notes.

Sixteen and a half miles of roads in the vicinity of Greensboro, N. C., are to be macadamized shortly at a cost of about \$3000 per mile.

The Tallapoosa Rural Letter Carriers' Association, R. H. Carlisle of Alexander City, Ala., president, has taken up the movement for good roads.

Governor Donaghey of Arkansas will, it is announced, support the plan for the construction of a State turnpike to connect with one in Missouri, giving an automobile drive from St. Louis through Arkansas to the Texas line.

Automobile owners of Virginia plan a demonstration on the State fair grounds at Richmond, August 17 and 18, to raise funds to be placed at the disposal of the Good Roads Association in promotion of improved highways.

Col. John Thompson, Tennessee Commissioner of Agriculture, will be requested to name about 100 delegates to attend the Good Roads Convention which has been called by Governor Patterson to meet at Nashville in September.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

MUCH BETTERMENT WORK.

Kansas City Southern Will Reduce Grades, Improve Alignment and Erect New Buildings.

A report from Kansas City says that about \$1,000,000 will be expended by the Kansas City Southern Railroad for cutting down grades. The line from Bunch, Okla., to Houston, Okla., 73 miles, will be reduced from 1½ per cent. to half of 1 per cent., and to improve the alignment seven or eight miles of new track will be built, making changes from the present route. Between DeQueen, Ark., and Shreveport, La., 125 miles, about 10 miles of new construction will be put in to improve the line, and grade reductions will also be made. President Edson is reported as saying that when the improvement work is completed 85-pound rails will have been laid on the entire system, concrete or steel bridges will have taken the place of wooden bridges, and every mile of track will be improved by reballasting. At present 41 per cent. of the track is cut down to half of 1 per cent. grade, and the rest will be brought to that standard.

It is further said that \$250,000 will be spent at the Kansas City terminals. A new freight house will be erected and increased shop facilities will be provided. Three new industrial tracks will be laid. This latter will open up considerable land for new warehouses, and will afford better facilities for handling present freight. At Pittsburg, Kans., and Shreveport, La., shop facilities will be enlarged, and, as heretofore reported, \$350,000 will be spent for warehouses and improved dock facilities at Port Arthur, Texas. Ballasting, additional passing tracks and new tracks at the terminals will cost \$500,000.

New Equipment, Rails, Etc.

The Nashville Interurban Railway has ordered from the J. G. Brill Company, Philadelphia, an electric passenger car and also an express car.

The Texas Traction Co., Dallas, Texas, is in the market for four high-speed passenger cars.

The St. Tammany & New Orleans Railway & Ferry Co., Covington, La., is reported to have received two motor cars from Hotchkiss Blue & Co. of Chicago, operated by 30-horse-power low-pressure engines of the White steamer type.

The Pensacola Electric Co. has purchased 10 carloads of 70-pound steel rails.

The Laurinburg & Southern Railroad, Laurinburg, N. C., will, it is reported, purchase a locomotive and passenger car. John F. McNair is president.

The Pennsylvania Railroad, it is reported, will either build or buy this year 250 or 300 steel passenger cars.

The Atchison, Topeka & Santa Fe Railway, according to a report, has ordered 41 baggage cars from the American Car & Foundry Co., St. Louis.

The Atlantic Coast Line is reported to have let contracts to the Barney & Smith Car Co. of Dayton, Ohio, for 500 double felt-lined ventilated 30-ton box cars, and to the Pressed Steel Car Co. of Pittsburg for 25 40-ton hopper-bottom phosphate cars.

New Lines Chartered.

The Arkansas, Oklahoma & Paris Railway Co. has been chartered in Arkansas to build a railroad from Morris Ferry, in the northern part of Little River county, into Oklahoma, and thence southwest into Texas. The capital is \$250,000, which is partially subscribed. The first part of the

route projected is from Morris Ferry, on the Kansas City Southern Railroad, westward 15 miles to Moon, Okla., on the St. Louis & San Francisco Railroad, and from there southwest 22 miles to Harris Ferry, on the Red River; total, 37 miles. It is ultimately proposed to extend the line to Paris, Texas. The incorporators are P. S. Brown and W. S. Pryor of Kansas City, J. M. Johnson, A. D. Dulaney and W. E. Kinsworthy of Ashdown, Ark.

The Crossett Railroad Co., capital \$25,000, has also been chartered in Arkansas. It has a line 10 miles long, extending westward from Crossett, on the Iron Mountain division of the Missouri Pacific, and may build an extension. The incorporators are E. W. Gates, A. Trieschman, J. C. Norcott, C. W. Gates and E. S. Crossett.

Kingsport and Greenville Road.

Leroy Park & Co., Greenville, Tenn., write that there is not as yet any organized company to build the proposed railroad from Kingsport, Tenn., through Green county to French Broad River, but that the length of the route is about 60 miles. Only preliminary surveys have been made, and they show light work, good grade and only one tunnel. There will be two river bridges. The survey is through a rolling country. Projected lines of the Norfolk & Western, the Carolina, Clinchfield & Ohio and the Southern Railway, some under construction, would connect with the road.

The region through which the line has been surveyed is rich in timber and iron, as well as being a superior farming and gardening country. For 20 years the citizens of Green county have desired such a road, attempting to secure it when there was no trunk line connection at either end, but now that the Carolina, Clinchfield & Ohio Railway, with its many connections, is within so short a distance, the people feel that there is only one possible way to attain their fullest material development, and that is by building the line. Efforts are being made to finance the enterprise.

Central's Shops at Macon, Ga.

The Central of Georgia Railway Co. is making progress with its work at Macon, Ga. An officer of the company writes:

"The car shop, repair tracks, powerhouse, reservoir, high service tank with pumping station have been completed; the engine terminal is well under way, and should be finished by September 1; the balance of the work is being contracted for as rapidly as possible, the American Bridge Co. having been given the contract for structural steel. The erecting shop will have 22 pits, with ample machinery to properly do the work, supported by boiler and blacksmith shops of suitable dimensions. The estimated cost of the work is \$1,500,000. Mr. C. K. Lawrence, chief engineer of this company, is in charge of the work, and entire plans are being prepared under his direction."

Through Oklahoma Mountains.

The King Lumber Co., Eubanks, Okla., writes that it contemplates building a railroad about 15 miles long from Eubanks through a mountainous country to Johns Valley. The survey has just been completed, but it is not yet decided whether the project is practical. If built, the line will probably be a private road owned by the lumber company. Connection will be made with the Frisco system at Eubanks. D. W. Spooner of Joplin, Mo., is engineer.

Articulated Compound Locomotives.

The American Locomotive Co. has issued a pamphlet, No. 10,034, presenting a complete description of the articulated compound locomotive, a paper read by C. J. Mellin, consulting engineer of the com-

pany, before the American Society of Mechanical Engineers. The description of this engine is devoted to its characteristic features, and there are line drawings of details as constructed by the company. There are also given line cut illustration of side elevations of different designs of articulated compound engines, including two preliminary designs for passenger service. In addition to these are some half-tone illustrations of several locomotives of this type built in this country, the pictures being accompanied by data relating to each.

Sanford to Kissimmee.

The Central Florida Traction Co., according to a dispatch from Orlando, Fla., is the name of the enterprise which proposes to build a railroad from Sanford via Winter Park and Orlando to Kissimmee, 45 miles. The preliminary organization shows the following officers: M. O. Overstreet, president; D. B. T. Bennett, first vice-president; Dr. J. H. Smith, second vice-president; W. A. Smith, treasurer; L. L. Payne, secretary; A. N. McKinley, general manager; directors, E. F. Sperry, A. McCallum, Dr. B. A. Howard and T. P. Warlow, who is also attorney. J. P. Hornaday and W. A. McClintock of New York are also said to be interested.

It is contemplated to operate the line with gasoline motor cars.

Brady to San Antonio.

W. B. Drake, vice-president and general superintendent of the Frisco system at Fort Worth, Texas, is quoted in a report from that city as saying that the company intends to build a new line from Brady, Texas, southward toward San Antonio, and that survey will begin immediately, equipment for the engineers having been forwarded for the work.

This line has been talked of for several years, and it is said that its construction will demand some of the most difficult railroad work ever attempted in Texas. There is a hilly country south of Brady which is expected will be difficult for permanently locating the route.

Nashville Interurban Is Busy.

The Nashville Interurban Railway, which was built by H. H. Mayberry and others between Nashville and Franklin, Tenn., about 18 miles, is now reported operating 26 trains a day, or 13 in each direction. President Mayberry is quoted as saying that the company is now having built at the works of the J. G. Brill Company, Philadelphia, another passenger car and an express car; also that about 60,000 passengers have been carried in the past three months. The line is now being ballasted with stone, and this work will soon be completed.

Only a Tentative Plan.

Concerning the report that the Atlanta & West Point Railroad would build a line from Sofkee to Macon, Ga., independently connecting the Macon & Birmingham Railroad with that city and making a through route from Montgomery and other Alabama points to the Atlantic Ocean via the Macon, Dublin & Savannah Railway, an official writes that there is nothing definite to be said at present. Some inquiries have been made looking to such result, but they are only tentative.

Receiver Appointed.

James F. Weed of Beaumont, Texas, has been appointed receiver for the Beaumont Traction Co. by the United States Circuit Court at Sherman, Texas, on the application of the Interstate Trust & Banking Co. of New Orleans, trustee for the bonds. It appears that the city of

Beaumont was about to take action to forfeit the franchise of the railway company, and a representative of the trust company is quoted as saying that the appointment of a receiver was necessary to protect the interest of the bondholders.

A Mineral Belt Railroad.

The St. Louis & Houston Mineral Belt Railroad Co. has been chartered, according to a dispatch from Jefferson City, Mo. The company has a capital of \$400,000, and proposes to build a line between Houston and Cabool, Mo., about 16 miles, all in Texas county. The stockholders are A. H. Johnson of Springfield, Mo.; M. G. Coyle, A. E. Leavitt, Clark Dooley, Robert Lamar, W. T. Elliott, C. F. Speak, R. A. Harrington, E. K. Lyles, all of Houston, Mo.

Erecting Railway Buildings.

The Quanah, Acme & Pacific Railroad of Quanah, Texas, according to a report from that place, is about to build two new depots there, besides car sheds, a building of solid concrete walls 50x50 feet; a round-house of concrete, 70x140x90 feet; shops, 40x90 feet, the latter adjoining the round-house. A contract has been let also for two oilhouses. Work is to be rushed on depots at Lazare, Swearingen and Paducah, Texas. John R. Southern is superintendent of buildings and bridges for the company.

Virginian to Build Branches.

The Virginian Railway, according to a report, will build several branches in Raleigh county, West Virginia, for developing coal lands. The total length of these lines is about 28 miles. They are as follows: Stone Coal branch, three miles; Laurel Fork extension of the former, three miles; Devil's Fork branch, six miles; Upper Stone Coal branch, two miles; Tommy Creek branch, four and three-quarters miles; Piney Creek extension of Winding Gulf branch, eight miles. The Devil's Fork branch extends partly into Wyoming county.

Six Changes of Line.

The Kansas City Southern Railway will make some changes of line between Stillwell, Okla., and Neame, La. The work is in six pieces of from three to eight miles in length, and the total is 27 miles. Bids are to be opened July 29. W. D. Hodge, Mena, Ark., is engineer in charge; A. F. Rust, Kansas City, Mo., is resident engineer.

Railroad Notes.

The Carolina, Clinchfield & Ohio Railway has issued a new timetable, which took effect July 25.

L. H. Mann has been appointed soliciting agent at Chicago, Ill., for the Southern Railway, vice E. F. McKee, resigned to accept service with another company. This change takes effect August 1.

The Frisco system is reported to have begun extensive improvement work on the line between Monett and Oklahoma City. Starting near Tulsa, Okla., and working toward Monett, which is in Missouri, 146 miles, trestles are to be filled in and grades reduced. Besides this, 85-pound rails will be laid between Tulsa and Afton.

Planting Potatoes.

Mr. J. A. Rowand of Elkton, Fla., informs the MANUFACTURERS' RECORD that at Elkton, which is a new station in the Hastings potato belt on the Florida East Coast Railway, about 300 acres was planted in potatoes this spring, and that more than 300 acres will be cleared this summer for next year's crop.

MINING

The Winding Gulf Colliery Co.

The MANUFACTURERS' RECORD has received further information regarding the plans of the Winding Gulf Colliery Co., 1503-13 Union Trust Building, Cincinnati, mentioned last week as to develop 3300 acres of coal land in Raleigh county, West Virginia. The designing and construction of the company's proposed tippie and its equipment will be in charge of F. C. Greene, Republic Building, Cleveland, Ohio, who will also be in charge of the construction and equipment of the fan-house. Messrs. Keller & Sibley, electrical engineers, Charleston, W. Va., will have charge of the construction and installation of the boiler plant and electrical equipment. Boilers of 1200 horse-power will be installed, with proper heating equipment, and probably 800-kilowatt generators in four units, with switchboards and steam pipe line connections with wiring, etc. The company will purchase a large number of mine cars, probably of steel construction, electric locomotives, mining machines and other machinery and equipment. Its officers are Justus Collins, president, Cincinnati; J. A. Renahan, vice-president, New York; J. S. Berry, secretary and treasurer, Cincinnati, and A. M. Herndon, superintendent, Abney, W. Va.

To Develop Kentucky Coal Lands.

According to authentic information received by the MANUFACTURERS' RECORD, the development of coal properties in Kentucky will probably soon be undertaken by a new company to be organized for this purpose. The Sterling Company of Louisville, it is stated, acting for local and Eastern capitalists, has purchased a portion of the holdings of the Brasher Coal Co. of Madisonville, including the Oak Hill mine near Nortonville, and about 5000 acres of other coal lands belonging to it and John B. Brasher, for \$250,000. In a few days, it is stated, the purchasers will organize the Hopkins County Coal Co., with a capital stock of \$250,000, to take over and operate the property. The Oak Hill mine is located on the Louisville & Nashville Railroad, and is within one mile of the Illinois Central Railroad. It is said to be the purpose of the new company to construct a railroad switch connecting the two lines, and also to purchase other coal lands for development in the near future.

Big Development Near Anniston.

Details of the organization of a company to develop extensive mineral deposits and timber lands near Anniston, Ala., are being completed by Capt. R. F. Kolb of Anniston. Captain Kolb telegraphs the MANUFACTURERS' RECORD that the title of the company is the Shinbone Valley Iron & Timber Co., and it is capitalized at \$600,000. It has acquired brown ore, manganese, graphite, mica and kaolin properties in Shinbone Valley and 25,000 acres of virgin timber—nearly all long-leaf yellow pine. The company will construct a railroad 16 miles long from Abel to Pyriton, on the Atlanta, Birmingham & Atlantic Railroad, and may later extend from Abel to De Armanville, on the Southern Railway. J. D. Hunter is the engineer in charge. Those associated with Captain Kolb include O. M. Alexander of Anniston, W. B. Davidson of Montgomery and P. M. Clark and C. W. Huffman of Lebanon, Tenn.

To Develop Georgia Iron Ore.

Among recent reports of new Southern industrial enterprises is the announcement that the Pigeon Mountain Iron Co. has been organized at Atlanta with a capital

stock of \$500,000 to develop iron-ore deposits in North Georgia. It is stated that the company has secured 4000 acres of mineral lands in Walker county, located about 18 miles from Chattanooga and five miles from Chicamauga, being accessible to the lines of the Central of Georgia and Chattanooga Southern railroads. It is estimated to contain 60,000,000 tons of ore readily available, about 50,000,000 tons of which is said to be hard ore, while not less than 7,500,000 tons is soft ore, carrying over 50 per cent. metallic iron. To begin operations the company proposes to issue \$90,000 first mortgage 5 per cent. gold bonds, \$100,000 7 per cent. cumulative preferred stock and \$350,000 common stock, the shares to be \$100 par value. Its officers are J. C. Haas, Montgomery, Ala., president; R. E. Watson, Atlanta, vice-president, and Edwin R. Haas, Atlanta, secretary and treasurer.

Lead and Zinc Development.

The Red Cloud Zinc Co. of Rush, Ark., which recently incorporated with a capital stock of \$50,000, informs the MANUFACTURERS' RECORD that it will continue the development of its zinc properties on Buffalo River in Marion county, Arkansas. The property consists of 645 acres of mineral land, including a water-power capable of development to a maximum of 30,000 horse-power. The zinc deposit analyzes from 60 to 66 per cent. metallic zinc, with a slight amount of iron. In addition to the mill which the company has in operation, it is expected to install other mills to facilitate development work. The capacity of its mines is 400 tons per 24 hours. Its officers are Isaac Reese, president; P. Koehler, vice-president and general manager; Charles Le Vasseur, mining engineer and superintendent, and D. O. Wheeler, secretary and treasurer.

Mining Notes

The West Kentucky Coal Co. of Sturgis, Ky., is reported to have closed contracts to furnish 600,000 tons of coal for shipment to Panama.

Browns Creek Land & Coal Co. of Welch, W. Va., has incorporated with a capital stock of \$100,000. Its incorporators are John H. Holt, Huntington, W. Va.; Howard H. Snyder, Media, Pa.; Herman Wendell, Wayne, Pa.; Morris Williams, Philadelphia, and others.

The Consolidated West Virginia-Ohio Coal Co. of Charleston, W. Va., has been incorporated with a capital stock of \$100,000 by E. Dale Field and James H. Field, both of Uniontown, Pa., and Charles E. Wilson of Dunbar, Pa.

Will Increase Operations.

It is announced that the Thompson Bros. Lumber Co. of Houston, Texas, has increased its capital stock from \$600,000 to \$2,100,000 and has purchased 500,000,000 feet of pine timber in Trinity county. The company, it is said, will erect at once a sawmill to cost \$300,000 and of 100,000 feet daily capacity, to be ready for operation within six months. It is also reported that it will erect 250 tenant-houses for the use of its employees.

Will Establish Sawmill.

The Deer Creek Lumber Co. of Cass, W. Va., which recently incorporated with a capital stock of \$75,000, informs the MANUFACTURERS' RECORD that it will erect a mill construction building at a cost of \$15,000 for sawmill purposes and equip it for a daily capacity of 50,000 feet of lumber. Officers of the company are J. F. Torbert, president; L. T. Brandon, secretary, and C. S. Harter, treasurer and superintendent.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Memphis Lumber Market.

[Special Cor. Manufacturers' Record.]
Memphis, Tenn., July 26.

Further inquiries and more frequent orders for solid carloads of lumber stock are giving additional strength to the market. Many mills are still out of operation, but stocks on hand are sufficient to meet normal requirements, and if the building situation continues as good as at present there will be a resumption of mills before fall. In this city building ran \$250,000 for the first six months this year above that of last year. The yellow-pine trade here is a little more active. Eastern business on ash is picking up. Poplar in the best grades has advanced a dollar or two. Gum in the thicker grades shows improvement. No change appears in export conditions, which are only fair.

Railroad construction work, municipal and private undertakings of large scope are going forward with good zest. A couple of tall office buildings will be erected in Memphis this year. Several railway lines have been projected in Arkansas anew. In Mississippi many of the mills are closed down, but all the towns and cities report healthy building activities.

Sawmill Construction Progressing.

The MANUFACTURERS' RECORD has received information regarding the progress of the E. B. Williams Cypress Co., Ltd., on the construction of its new sawmill at Patterson, La. The plant will be built entirely of steel, and contracts for all material and equipment have been closed with the exception of an electric lumber carrier system. Contract for this will probably be awarded within two weeks. Besides auxiliary machinery, the sawmill will be equipped with two bands and a vertical resaw, furnished by the Filer & Stowell Company of Milwaukee. It will have a daily capacity of approximately 150,000 feet of lumber. Equipment for the powerhouse was supplied by the Casey-Hedges Company of Chattanooga. The company is experimenting with new methods of kiln-drying cypress, and if successful, instead of carrying stock on the yard and air-drying, it will kiln-dry from 60 to 80 per cent. of its production. It has installed an Aweco kiln, furnished by the American Wood Extract Co. of Seattle, Wash., and expects to make final tests within a few days. Officers of the company are E. B. Williams, president; C. S. Williams, vice-president, and L. M. Williams, secretary and treasurer.

Big Sawmill to Be Enlarged.

An important and interesting announcement has recently been made regarding the plans of the Aripeka Sawmills of Fivay, Fla., for the enlargement of its plant at that place. According to a statement attributed to T. H. Martin, general manager of the company, it is intended to erect and equip two additional mills at an expenditure of about \$250,000 each, construction work to begin within six months and pushed to an early completion. The addition of the proposed mills will largely increase the facilities of the company, whose present plant is one of the largest in Florida. It consists of two double-band mills with a daily capacity of 150,000 feet of lumber, planing mill of 75,000 feet daily capacity and other equipment, including 60 miles of tramroad. It was constructed under the supervision of General Manager T. H. Martin, and, with the completion of the two new mills, will repre-

sent an investment of \$1,500,000. The company's timber lands embrace about 250,000 acres of pine and cypress, extending from the vicinity of Tampa north to the Citrus county line.

To Manufacture Mahogany Products, Etc.

An important announcement has recently been made relative to the establishment at Tampa of a large mahogany and cedar sawmill and veneering plant. The American Mahogany Co., through Thos. W. Troy & Co. of Tampa, is negotiating with the Seaboard Air Line Railway for a site and terminal facilities on Seddon Island. When the details of location have been decided it is expected to erect a steel and concrete plant of modern design and equipment to cost about \$250,000. In connection with the enterprise Troy & Co. will inaugurate a steamship line between Tampa and Honduras to supply the plant with mahogany logs from Central America.

Probable Timber Development.

Current reports from Bluefield, W. Va., state that R. H. Angell & Co. of Roanoke, Va., have secured 4000 acres of timber land on Laurel Creek, in Bland county, Virginia, and will erect a large band mill for development purposes. Regarding the enterprise the Hardwood Lumber & Mining Co., Roanoke, of which R. H. Angell is president, telegraphs the MANUFACTURERS' RECORD that it is now negotiating for the sale of its 6000 acres of timber land, but if it does not sell the company will erect two mills of 25,000 feet daily capacity each to develop the timber.

Testing a Kiln.

E. B. Williams Cypress Co., Ltd., Patterson, La., in a letter to the MANUFACTURERS' RECORD says:

"We have put in an Aweco kiln furnished by the American Wood Extract Co. of Seattle, Wash., and expect to make the final tests on same this week. We consider the success of this kiln to be a most important event in the history of cypress manufacturing, and if successful it will be the means of a great saving of cost both in labor and lumber."

Increasing Its Logging Facilities.

It is announced that the Van Sant-Kitchen Lumber Co. has begun operations at its band mill at Moore's Branch, near Whitesburg, Ky., employing 100 workmen. Under the supervision of J. L. Proctor of Vilas, Ky., who is the manager of the plant, it is stated that the company will soon begin the construction of two miles of lumber road from the mill to the headwaters of Moore's Branch for logging purposes. Communications should be addressed to J. L. Proctor at Vilas.

Kirby Company Will Rebuild.

The Kirby Lumber Co., B. F. Bonner, general manager, Houston, Texas, telegraphs the MANUFACTURERS' RECORD that the company's plant at Brownell will be rebuilt. This plant was destroyed by fire last week at a loss of \$300,000, and it included a circular and band mill, drykilns, 12,000,000 feet of lumber, etc. The company will be in the market for a complete new plant.

Norfolk Builders' Exchange.

Organization of the Norfolk (Va.) Builders' Exchange was effected last week by the election of the following temporary officers to serve for a period of 30 days: E. D. Hobbs, president; George T. Banks, Frank T. Clark and Perry W. Ruth, vice-presidents; F. G. Boyd, secretary, and M. A. Williams, treasurer.

Lumber Notes.

The Southern Mahogany Co. of Charleston, S. C., has incorporated with a capital stock of \$200,000, and is reported as intending to erect a factory at Charleston.

The Mobile Timber Co. of Mobile, Ala., has incorporated with a capital stock of \$125,000, its incorporators being R. G. Haysen, M. C. Moore and Victor L. Brown.

It is announced that the Fairford (Ala.) Lumber Co., W. V. Terrill, superintendent, will construct a five-mile line of logging road from a tract of pine land which it owns to the main line of the Tombigbee Valley Railroad, connecting near Loper, Ala.

FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

Fertilizers and Pumps for China.

T. J. League, Tsingtau, China, writes the MANUFACTURERS' RECORD:

"There is not much I can say as to the introduction of machinery into China, largely because the American manufacturer seems so utterly indifferent to conditions here. There are great possibilities, but the market must be developed by demonstration. It must also be followed up with persistence. Everything, too, needs to be of the simplest and strongest patterns. I have written to several manufacturers of pumps with reference to supplying simple irrigating pumps to be operated by hand. They send a lot of catalogues which are absolutely worthless, and offer their stock of pumps for sale for spot cash. If any manufacturer were willing to take the trouble to produce a very simple hand pump for raising water 15 to 20 feet and send half a dozen to a properly accredited person to place at as many points and make demonstrations, the probabilities are that good business would follow. There is a crying need for some such thing. There is a wide area where there is abundant ground water within 15 feet of the surface, and the crops fail entirely for want of rain. Besides, there are thousands of vegetable growers who depend on irrigation, and some such instrument would be a great boon to them. But they must see it in operation before they will buy. There are possibilities of selling large quantities of chemical fertilizers. If you have seen the report of Consul Gracey of this port you will have my idea as to how that should be managed."

For Spinning and Weaving Mills.

Kinarivala Brothers & Co., 1523 Raja Mehta street, Ahmedabad, India, write the MANUFACTURERS' RECORD:

"We want prices and samples of leather pickers, varnished heels, reeds, shuttles, bobbins, spools, loom harness, spinning-ring travelers, American cotton yarns, twine and ropes, belt fasteners, and all the requirements of a spinning and weaving mill. We require sole selling agencies for these articles. Best American references given."

Wanted for Russian Trade.

H. Herwaser, No. 13 Nalewski street, Warsaw, Russia, writes the MANUFACTURERS' RECORD:

"Please furnish me with information as to the sources of supply of the following goods: Needles, for hand and machine work; stamped buttons, silk, cut goods, dry goods, lamp burners for petroleum light, rubber thread, medical remedies and instruments, cosmetics, for which there is great demand."

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

The Waverly Cotton Mill.

The Waverly Cotton Mill Co. of Laurinburg, N. C., will have its buildings ready for machinery by August 1, and expects to begin spinning by September 1. This company will operate 20,000 spindles, etc., on the production of hosiery yarns—16s to 30s. Its mill will be driven by electricity, the power being obtained from 550-horse-power boilers and cross-compound condensing engine. R. C. Bibberstein of Charlotte, N. C., is the company's engineer in charge. The organization of the Waverly Cotton Mill Co. and its plans for a mill were announced some months ago. J. P. McRae is president, and the enterprise is under the same management as the Scotland Cotton Mills and the Dickson Cotton Mills of Laurinburg.

The Entwistle Manufacturing Co.

William Entwistle and Geo. P. Entwistle of Rockingham, N. C., will organize the Entwistle Manufacturing Co. to build a mill of 40,000 spindles and 1000 looms for manufacturing shirting, etc. They have not engaged the engineer in charge, and will probably capitalize the enterprise at \$1,000,000. The Messrs. Entwistle are officers of the Pee Dee Manufacturing Co., which operates 15,456 ring spindles, 704 narrow looms, etc. Wm. P. Entwistle has been elected president; W. B. Cole, vice-president and general manager, and Geo. P. Entwistle, secretary-treasurer.

Will Use Electric Power.

The Dacotah Cotton Mills, the Nokomis Cotton Mills and the Wrennham Cotton Mills at Lexington, N. C., have decided to use electricity for power. C. A. Hunt, Jr., president of each company, has contracted with the Southern Power Co., main office Charlotte, N. C., for electricity from its transmission lines near Lexington, and will use about 2000 horse-power. He has awarded contracts for the electrical motors and other equipment. The three mills operate a total of 34,760 spindles and 1082 looms.

The Arcadia Mill.

The Arcadia (S. C.) Mills awarded contract to J. F. Gallivan Building Co. of Greenville, S. C., for erection of addition, as reported last week. This addition will be of brick, 105x255 feet, and is to be equipped with 10,000 spindles and 250 looms. J. E. Sirrine of Greenville, S. C., is the engineer in charge, and all contracts have been awarded. The company now operates 10,000 spindles and 250 looms on sheeling production.

The Melville Mill.

The Melville Woolen Co., Fredericksburg, Va., is progressing with the construction of its addition, reported in June. It is erecting a two-story 105x69-foot building at a cost of \$12,000, and has contracted for the additional machinery. The increased equipment will comprise 58 looms, 10 sets cards, etc., for manufacturing cassimeres, flannels and overcoatings.

Will Knit Coats.

The Goodenow-Brookfield Knitting Co. has organized and installed electric-power equipment with machinery for manufac-

turing knit coats. J. Frank Goodenow is president-secretary-treasurer, while Arthur D. Brookfield is manager and Rudolph Mueller is superintendent. This company was mentioned recently as incorporating with a capital stock of \$10,000. Its main offices are at 211 Westport avenue, Kansas City, Mo.

The Beaver Dam Mills.

The Beaver Dam Mills of Edgefield, S. C., will be incorporated to take over the Edgefield Manufacturing Co., whose property at Edgefield, S. C., was noted last week as purchased by Lewis W. Parker of Greenville, S. C. The new company will have a capital stock of \$200,000 and will double the mill's present capacity, increasing it from 5000 spindles and 328 looms to 10,000 spindles, etc. B. F. Zimmerman of Greenville is to be president and treasurer.

The Puritan Cordage Mills.

The Puritan Cordage Mills of Louisville, Ky., is now ready to deliver sash cord. This company's organization and plant have been noted heretofore. Last month the MANUFACTURERS' RECORD described the \$60,000 Puritan equipment, which includes 2000 spindles, rope machinery, electric motors, etc., for a daily output of 5000 pounds. Chas. T. Wolfe is the company's president.

A Bag Cloth Mill.

The American Bag Co. of Memphis, Tenn., will organize a company to build a mill for manufacturing bag cloth. It will probably capitalize at \$250,000.

Textile Notes.

W. B. Smith of Ruston, La., is reported as planning the organization of a company to build a cotton-batting mill, to cost \$50,000, at Monroe, La.

The Jasper Miller Son's Company of Charlotte, N. C., has been incorporated with a capital stock of \$20,000 to manufacture cotton batting, by Jasper Miller and associates.

The Dudley Shoals Cotton Mill Co. of Granite Falls, S. C., has installed an auxiliary steam plant of 125 horse-power to furnish power when its hydro-electric plant is affected by low water.

W. J. Thackston, Lewis W. Parker, E. A. Smyth and others of Greenville, S. C., have purchased the Reedy River Manufacturing Co. property near Greenville. Their bid was \$149,400, and the plant includes 12,000 spindles, 371 looms, mill buildings, warehouses, etc.

Free Iron Ore at Birmingham.

[Birmingham Age-Herald.]

It is earnestly hoped that President Taft will not insist upon foreign coal and ore being admitted to the United States free of duty. He is said to be seeking to influence Congress in favor of placing raw material on the free list, but when the Birmingham district's side is presented to him he will, it is believed, see the harmfulness of his policy and the reasonableness of the protest. Representative business men, fully realizing what a serious blow free coal and ore would be to capital invested in Alabama's mineral development, have telegraphed the President and in a few words have made it clear that free ore would not only jeopardize the millions of dollars already invested in this State, "but would prevent further investments now in sight."

The President enjoys the reputation of being a businesslike man as well as a just man, and it will be a surprise and a disappointment to the vast business interests of Alabama if he does not respond favorably to the petition of those who adequately represent the solid enterprise of this sec-

tion. President Taft is in a dilemma, to be sure. He has in mind his campaign pledges to the effect that tariff revision would be downward, and Congress is about to put upon consumers a tariff worse than Dingley's. He is honest in his desire to give the masses relief. But fairness and justice to all sections would certainly demand, as the Baltimore MANUFACTURERS' RECORD points out, that one section should not be sacrificed to enrich special interests in other sections.

Let ore and coal be kept off the free list and the Birmingham district will enter upon a new era of prosperity that will surpass all former records.

[Birmingham News.]

The proposition to put iron ore on the free list, which it is understood is being considered by President Taft among the things for which he will use his influence with Congress in the adoption of a new tariff law, has been met with a strong protest from the editor of the Baltimore MANUFACTURERS' RECORD in a telegram to the President urging that this action be not taken, and contending for an equal measure of protection to the industrial interests of the South as are given to those of other parts of the country.

A number of prominent business men of Birmingham, representing large financial and industrial interests in this district, have also sent a telegram to President Taft setting forth the extensive investments in ore and coal properties in Alabama and the mineral regions of the South that would be affected by the adoption of the proposed free ore and coal, and calling attention to the fact that such a proposition if adopted might jeopardize these interests and would prevent further investments no win sight.

A reasonable protection on ore in the South would be only fair and proper in consideration of the protective principle in force, and would be putting the South in a position to compete with other parts of the country in the industrial field. President Taft has shown a disposition to give the South fair treatment, and that is all it asks at the hands of the Federal Government. It requests only that it be shown such consideration in the matter of the public policy as is accorded to other districts of the country, and hence the stand the industrial interests of the South has taken in this matter.

Red Gum Veneer.

During 1908 there were cut in this country into veneer 382,542,000 feet board measure of logs, valued at \$7,891,000, as against 348,523,000 feet, valued at \$6,436,000, in 1907, according to statistics just published by the Bureau of the Census in co-operation with the United States Forest Service. Red gum, as in the preceding year, ranked first among the woods used for veneer, 119,945 feet being consumed, with a valuation of \$1,272,000, forming a percentage of 31.4 of the total consumption. The demand for red gum was even greater than in 1907, when its percentage of the whole consumption was 29.5. Among other woods, with the exception of yellow pine, which shows an important increase, no great increase is noted.

Henry A. Alexander of the Atlanta, Ga., bar has compiled the Mechanics' and Materialmen's Lien Laws of the South-eastern States, with State and Federal decisions bearing upon them. The compilation covers Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Virginia.

The Board of Trade of Jacksonville, Fla., H. H. Richardson, secretary, has issued in convenient folder form a directory of its members.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECT

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

BRIDGES, CULVERTS, VIADUCTS

Barboursville, W. Va.—Cabell county awarded contract to Brackett Bridge Co., Cincinnati, Ohio, at \$12,395 to construct steel and iron superstructure for bridge over Guyandotte River. (Recently mentioned.)

Columbus, Ga.—Bids will be opened August 20 for construction of bridge over Baker Creek, between Muscogee and Talbot counties; E. J. Rankin and others, commissioners of Muscogee county, Columbus; A. Mizell and others, commissioners of Talbot county, Talbotton, Ga. (See "Machinery Wanted.")

Greenville, S. C.—Greenville and Pickens counties awarded contract to A. D. McClain, Spartanburg, S. C., to construct wooden bridge over Saluda River at \$3100. (Recently mentioned.)

Hagerstown, Md.—Washington county will construct reinforced concrete bridge over Beaver Creek; bids to be opened August 3; John E. Wagaman, clerk. (See "Machinery Wanted.")

Milton, Fla.—A. D. McClain, Spartanburg, S. C., has contract at \$5900 to construct steel bridge over Black River.

Kansas City, Mo.—Board of Public Works awarded contract to Midland Bridge Co. of Kansas City at \$10,176 to construct concrete bridge over Brush Creek on Prospect avenue. (Recently mentioned.)

CANNING AND PACKING PLANTS

McDade, Texas.—N. K. Freeman will establish cannery recently reported; capacity, 12,000 to 15,000 cans daily. (See "Machinery Wanted.")

Stowell, Texas.—Stowell Canning Co. incorporated by R. M. White, E. A. Hughes, L. G. Ogden and others.

Texarkana, Ark.—Wade Colonization Co., M. C. Wade, president, suite 315, State National Bank Bldg., contemplates establishment of fruit and vegetable cannery. (See "Machinery Wanted.")

Wynnewood, Okla.—Wynnewood Canning and Syrup Factory (T. A. Threlkeld), recently noted to establish cannery and syrup

factory, has purchased machinery; will erect 48x80-foot wood building. (See "Miscellaneous Manufacturing Plants" and "Machinery Wanted.")

CLAYWORKING PLANTS

Frostburg, Md.—Bricks.—Mayer Bros. will establish plant for manufacturing building and paving brick; will erect two buildings.

Giddings, Texas.—Pressed Brick.—Giddings Pressed Brick & Gln Co. incorporated with \$30,000 capital stock by J. G. Kapper, W. O. Bowers, Andreas Bittmer and others.

Lynchburg, Va.—Bricks.—Adams Bros.—Payne Company will install additional machinery, increasing capacity to 100,000 bricks daily.

McDade, Texas.—N. K. Freeman will establish brick plant recently reported; 20,000 daily capacity. (See "Machinery Wanted.")

Ragland, Ala.—Bricks.—Wipicoba Clay Works will expend \$50,000 for improvements to brick plant.

COAL MINES AND COKE OVENS

Abney, W. Va.—Winding Gulf Colliery Co., Justus Collins, president, main offices 1503 Union Trust Bldg., Cincinnati, Ohio, recently noted to develop mines near Abney, has selected F. C. Greene, Republic Bldg., Cleveland, Ohio, to have charge of designing and construction of tipples and equipment, fan-house and equipment; Keller & Sibley, Charleston, W. Va., in charge of installation and construction of boiler plant and electrical equipment, including 1200-horse-power boilers, probably 800-kilowatt generators, steam pipe line connections, etc.; full capacity of mines, 500,000 tons per annum; J. A. Renahan, vice-president; J. S. Berry, secretary-treasurer; A. M. Herndon, superintendent, Abney. (See "Machinery Wanted.")

Birmingham, Ala.—Southern Iron & Steel Co. has resumed operations at Altoona coal mines and Crudup iron mines.

Charleston, W. Va.—Consolidated West Virginia-Ohio Coal Co. incorporated with \$300,000 capital stock by E. Dale Field and James I. Field, both of Uniontown, Pa., and Chas. E. Wilson, Dunbar, Pa.

Clarksburg, W. Va.—Redlick Run Coal & Coke Co., recently reported incorporated, will not operate at present; Isaac G. Roby, president; E. D. Brown, secretary-treasurer.

Dallas, Texas.—Reid Coal & Mining Co. incorporated with \$100,000 capital stock by W. Reid, Royal A. Ferris, Nathan Adams and others.

Gordon, Texas.—W. W. Johnson, recently noted to develop coal mines, proposes to sink and timber two or more shafts to coal; also provide air shafts; contemplates providing water supply and platting town for use of lessees, and leasing coal on royalty.

Little Rock, Ark.—Little Rock Packet Co. is considering construction of coal tipples at river and building of railroad from mine to river, distance $1\frac{1}{2}$ miles, for transporting coal by barge.

Nemo, Ky.—Tennessee Timber, Coal & Iron Co., C. W. Whitcomb, general manager, 161 Devonshire St., Boston, Mass., is arranging for construction of short-line railway to its properties from Queen & Crescent Route of Southern Railway; will undertake certain development work by diamond drilling, etc., but will operate as holding company; owns 58,500 acres coal, iron and timber land in Cumberland and Morgan counties; now preparing contracts for execution with companies which contemplate extensive coal mining and lumber manufacturing, erection of charcoal iron furnaces and foundries, etc. (Incorporation of company and plans previously reported.)

Nortonville, Ky.—Hopkins County Coal Co. will be organized with \$250,000 capital stock to take over and operate properties recently noted (under Madisonville, Ky.) purchased by local and Eastern capitalists, represented by Sam T. Castleman and Geo. C. Sandifer of Madisonville; property includes Oak Hill mines near Nortonville and about 3000 acres other coal lands; company reported to build one mile switch from mine to railroad; purchase price \$250,000.

Welch, W. Va.—Browns Creek Land & Coal Co. incorporated with \$100,000 capital stock by John H. Holt, Huntington, W. Va.; Howard H. Snyder, Media, Pa.; Herman Wendell, Wayne, Pa.; Morris Williams, Philadelphia, Pa., and others.

Welch, W. Va.—Pocahontas Smokeless Coal Co., recently reported incorporated with \$50,000

capital stock, elected W. E. Deegans, Glen Jean, W. Va., president; P. E. Gallagher, St. Albans, W. Va., vice-president, and O. C. Huffman of Welch, secretary-treasurer; organized to absorb Tug River Colliery Co. of Welch, now operated by Gallagher & Huffman under sublease from Slick Rock Coal Co., and to purchase leasehold and equipment of Slick Rock company.

COTTON COMPRESSES AND GINS

Bay Minette, Ala.—T. A. Huggins will establish cotton gin.

Bule, N. C.—Raft Swamp Co-operative Milling & Ginning Co. incorporated with \$5000 capital stock by H. L. Baxey, H. F. Townsend and others.

Clover, S. C.—W. B. Stroup and associates awarded contract to W. I. Brison, Clover, for erection of 20-ton cottonseed-oil mill and gin. (Previously noted.)

Giddings, Texas.—Giddings Pressed Brick & Gln Co. incorporated with \$30,000 capital stock by J. G. Kapper, W. O. Bowers, Andreas Bittmer and others.

Lagrange, Texas.—Lagrange Gin & Milling Co. incorporated with \$15,000 capital stock by John Belzer, Carl Wiemken and H. G. Mohrmusen.

Lancaster, Texas.—Lancaster Cotton Oil Co. will install 70-saw ginning outfit, doubling capacity of plant.

Maxton, N. C.—Planters' Gin Co. incorporated with \$1500 capital stock by W. S. McNair, J. S. McRae and others.

Milledgeville, Ga.—Milledgeville Cotton Co. awarded contract to Webb Press Co., Minden, La., for cotton compress with capacity of one bale a minute.

Mineola, Texas.—Citizens' Compress Co. incorporated with \$10,000 capital stock by J. S. Reese, R. J. Gaston, A. Paten and others.

Monticello, Miss.—Monticello Compress & Warehouse Co., recently reported incorporated with \$25,000 capital stock, will operate plant with capacity of 800 bales cotton daily; will erect fireproof 200x300-foot structure; has purchased machinery; John H. Arrington, president; E. S. Fairman, secretary-treasurer; M. T. Murphree, promoter, in charge of construction. (See "Machinery Wanted.")

Ovett, Miss.—Ovett Gin Co. incorporated with \$3000 capital stock by K. C. Hall and others.

Palmer, Texas.—Farmers' Gin Co. organized with \$15,000 capital stock; will establish brick cotton gin.

Rosenberg, Texas.—Rosenberg Gin Co. incorporated with \$3000 capital stock by J. A. Robertson, S. J. Winston, Clem Bassett and August Myers.

Sagerton, Texas.—Sagerton Compress Co. incorporated with \$30,000 capital stock by Baker Hoskins, C. W. Hoskins and F. M. Younk.

San Marcos, Texas.—San Marcos Utilities Co. incorporated with \$200,000 capital stock by V. L. Brooks and others. (See "Miscellaneous Manufacturing Plants.")

Tecumseh, Okla.—Farmers' Independent Cotton Gin Co. incorporated with \$8000 capital stock by J. R. Landsdown, C. E. Hook, J. G. Hankey and others.

COTTONSEED-OIL MILLS

Anderson, S. C.—Anderson Phosphate & Oil Co. will overhaul machinery and make other improvements. (See "Miscellaneous Manufacturing Plants.")

Bruceville, Texas.—Bruceville Cotton Oil Co. incorporated with \$40,000 capital stock by Edgar Mixson, E. T. Bruce and W. L. Gresham.

Clover, S. C.—W. B. Stroup and associates awarded contract to W. I. Brison, Clover, for erection of 20-ton cottonseed-oil mill and cotton gin, to cost \$5000. (Previously noted.)

Mt. Olive, N. C.—Southern States Cotton Oil Refining Co., Wilmington, N. C., recently noted to establish oil mills and refineries at Wilmington and other cities, awarded contract to D. J. Rose & Co., Rocky Mount, N. C., for erection of proposed oil mill at Mt. Olive.

New Orleans, La.—Gulf & Valley Cotton Oil Co. incorporated with \$25,000 capital stock by Adolph and John Aspergren and A. P. Sanchez.

St. George, S. C.—St. George Cotton Oil & Manufacturing Co. incorporated with \$30,000 capital stock.

Texarkana, Texas.—Farmers' Oil & Fertilizer Co. incorporated with \$100,000 capital stock; R. J. O'Dwyer, president; W. T. Murphy, vice-president; J. O. Battle, secretary; D. C. Harrington, treasurer; will establish cottonseed-oil mill and fertilizer factory.

ELECTRIC-LIGHT AND POWER PLANTS

Alvord, Texas.—E. E. Gose, Decatur, Texas, is considering construction of electric-light plant at Alvord.

Binghamton, Tenn.—Binghamton Light & Power Co., W. M. Tucker, manager, recently noted to double boiler and generator capacity of plant, contemplates installing 150 or 200-kilowatt generator, with boiler and engine, about September 1. (See "Machinery Wanted.")

Bremen, Ga.—City has engaged W. J. Radcliffe, Tallapoosa, Ga., to superintend construction of electric-light plant; (\$3000 bond issue recently mentioned.)

Citronelle, Ala.—E. E. Nichols and associates will organize company to establish electric-light plant; reported to install equipment within 60 to 90 days.

Clarksville, Mo.—Company will be organized to construct electric-light plant. E. N. Moody is secretary committee in charge.

Clifton, Texas.—Clifton Electric Light & Power Co., recently reported incorporated with \$25,000 capital stock, has purchased electric-light plant, including building, water-power, etc.; is installing duplicate plant operated by steam; J. P. Chambers, president; A. A. Slaughter, vice-president; W. G. Scarff, secretary-treasurer.

Elberton, Ga.—Park A. Dallis, engineer, Atlanta, Ga., submitted report, which City Council has adopted, for furnishing increased electric power; will install 300-horse-power generator at electric-light plant, increase water-power by lowering tailrace, remove and install present generator at pumping station, where it will be connected with engines used for pumping water, and construct practically new line from electric plant to city; \$5000 bond issue voted. (Recently mentioned.)

Eldorado Springs, Mo.—B. F. Proctor will, it is reported, install engine and electric generator.

Highland Park, P. O. Richmond, Va.—Bids are invited until July 31 for preparing plans and specifications for electric-light and water-works systems; W. T. Quarles, chairman Committee on Light and Water, 514 Fifth Ave. (Recently mentioned. See "Machinery Wanted.")

Jacksonville, Fla.—Jacksonville Electric Co. will meet August 16 to consider increasing capital stock by \$400,000; Clement R. Ford, secretary.

Leesburg, Fla.—J. Y. Clark, manager Leesburg Ice Co., recently noted to have received franchise for construction of electric-light system and for water-works, placed contract with Chicago Bridge and Iron Works, Chicago, for 80,000-gallon tank and ordered generator and engine from Skinner Engine Co., Erie, Pa.

Lexington, Tenn.—City is considering construction of electric-light plant and water-works; wants to correspond with consulting engineer; cost not over \$15,000. Address H. E. Graper. (Previously mentioned. See "Machinery Wanted.")

Lubbock, Texas.—Lubbock Ice & Light Co., W. D. Benson, president, recently reported incorporated with \$25,000 capital stock, will erect \$2000 brick 50x150-foot building; will install 75-kilowatt alternating-current 1100-volt single-phase electric plant; will open machinery proposals about August 1; R. B. Ellis, general manager. (See "Machinery Wanted.")

Memphis, Tenn.—Ford, Bacon & Davis, contracting engineers, 24 Broad St., New York, have submitted plans to contractors and will soon award contract for proposed \$100,000 addition to power plant of Memphis Street Railway Co.

Monett, Mo.—City will make additions to electric-light plant and building; L. G. Knapp & Co., Kansas City, Mo., engineers in charge; Perry Short, Monett, may be addressed. (See "Machinery Wanted.")

Okemah, Okla.—M. A. Earl, Muskogee, Okla., is preparing plans. It is reported, for electric-light plant and water-works; estimated cost, \$50,000.

San Marcos, Texas.—San Marcos Utilities

Company incorporated with \$300,000 capital stock by V. L. Brooks and others, includes in charter privileges establishment of electric-lighting plant. (See "Miscellaneous Manufacturing Plants.")

Suffolk, Va.—Suffolk Gas & Electric Co. incorporated with \$15,000 capital stock; W. H. Venable, president; W. W. Starke, vice-president, and M. G. Mulvey, secretary-treasurer, all of Norfolk, Va.

Vicksburg, Miss.—Mississippi Electric Co. incorporated with \$10,000 capital stock by A. A. Woods, A. M. Paxton and others.

Wagoner, Okla.—City will vote in August on issuance of \$300,000 bonds for electric-light, water-works and city hall. Address The Mayor.

FLOUR, FEED AND MEAL MILLS

Baton Rouge, La.—Capital City Oil Mill, J. C. Hamilton, manager, will establish feed-products mill; capacity, three carloads daily; will erect building.

Bethpage, Tenn.—Ed. S. Payne, James Chenaunt and D. H. Chenaunt have purchased flouring mill and 60,000-bushel grain elevator at Rogana; will install new equipment; output to be 40 barrels flour daily.

Lexington, Va.—Moses Bros. will make improvements to plant, including widening of mill race six feet for entire course, making forebay 20 feet clear, cemented on both sides and bottom, installation of new water-wheel and corn-mill machinery, increasing capacity to 1000 bushels of corn daily and constructing bridge larger than and to replace present one.

Mores, La.—White Swan Mill will make improvements to plant, including replacing wooden pillars with brick ones at warehouse and installation of new machinery.

FOUNDRY AND MACHINE PLANTS

Baltimore, Md.—Stoves and Ironware.—A. Weiskettel & Son, 2000 Aliceanna St., will erect two additional buildings at Bayview Junction; 75x100 feet and 100x150 feet; brick; concrete foundations.

Charlotte, N. C.—Foundry.—Cole Manufacturing Co. will erect six buildings, including foundry; manufactures harvester and farming machinery. (See "Miscellaneous Manufacturing Plants.")

Davidson, N. C.—Machine Shop.—Messrs. Bratton will establish machine shop and woodworking plant.

Hattiesburg, Miss.—Blow Pipe and Sheet Metal.—Hattiesburg Blow Pipe and Sheet Metal Works incorporated with \$10,000 capital stock by F. H. Campbell, C. C. Eure and others.

Stikeston, Mo.—Stoves.—Pinnell Stove Co. incorporated with \$10,000 capital stock by N. G. Holley, C. C. Pinnell, David Dickworth and others.

Spartanburg, S. C.—Doffing Machines.—Russell-Compton Machine Co. will equip plant especially for manufacturing Hill-Booser doffing machines.

St. Louis, Mo.—Pumps.—Lowe-Stephenson Pump Co. incorporated with \$10,000 capital stock by Albert H. Lowe, Charles H. Stephenson, Guy Stephenson and others.

GAS AND OIL DEVELOPMENTS

Aplison, Tenn.—W. L. Taylor, R. F. D. No. 1, Box 63, contemplates development of leased oil and gas lands.

Elkins, W. Va.—West Virginia Central Gas Co. will expend \$25,000 for extending pipe line from Beverly to Huttonsville, W. Va.

Gulfport, Miss.—Southern Investment Co. organized with \$30,000 capital stock by P. H. N. Tiffin, J. B. Howie, Geo. M. Foote and others; purchased and will develop 80 acres of land at Bayou Bernard.

Gulfport, Miss.—Bankers & Merchants' Oil & Gas Co. organized with \$50,000 capital stock by Geo. M. Foote, P. H. N. Tiffin, J. W. Howie and others.

Hubbard, Texas.—Hubbard Oil Co. incorporated with \$80,000 capital stock by G. L. White, Ed. Woodall and R. L. White.

Muskogee, Okla.—Ruffen Oil & Gas Co. incorporated with \$10,000 capital stock by K. S. Weeks, John L. Weisner, J. Scott and others.

Oklahoma.—Quintuple Oil Co. of Pittsburg incorporated with \$100,000 capital stock by John Eaton, Louis Sands, Louis Brown and others, all of Pittsburg, Pa.

Parkersburg, W. Va.—Ridge Oil & Gas Co. incorporated with \$6400 capital stock by Loyal Gilbert, C. H. Steinbeck, H. G. Butcher and others.

Roane County, W. Va.—Ohio Fuel Oil Co. incorporated with \$50,000 capital stock by

Frank I. Falk, F. S. Henderson, Wm. Hunter, Jr., and others, all of Pittsburg, Pa.

Sapulpa, Okla.—Tuma Creek Oil Co. incorporated with \$10,000 capital stock by W. A. Bovaire, A. R. Davis, W. Bovaire and others.

Sapulpa, Okla.—Western Oil Station Co. incorporated with \$5000 capital stock by W. R. Douglas, J. Harvey Smith, both of Sapulpa, and W. J. Collier, Tulsa, Okla.

Texarkana, Texas.—Texarkana Gas & Oil Co. incorporated with \$100,000 capital stock by J. E. Morris, M. D. Tilson and J. E. Blackburn.

Tulsa, Okla.—Worth Oil Co. incorporated with \$100,000 capital stock by Harry Heasley, Pittsburg, Pa.; Randolph Shirk and A. W. Leonard, both of Tulsa.

ICE AND COLD-STORAGE PLANTS

Chillicothe, Mo.—Chillicothe Ice & Fuel Co. incorporated with \$35,000 capital stock by C. H. Hackney, William Turner, W. J. Wiley and others.

Dallas, Texas.—Thos. Field, 255 Main St., contemplates installation of 10 to 15-ton ice machine. (See "Machinery Wanted.")

Daphne, Ala.—A. E. Strong and W. G. Brandenburg will establish ice plant and creamery.

Dillon, S. C.—Dillon Manufacturing Co. incorporated with \$10,000 capital stock to manufacture ice, etc., by T. A. Dillon and C. F. O'Ferrall.

Lindsay, Okla.—Lindsay Ice Co. incorporated with \$15,000 capital stock by O. L. Grimes, P. G. Spaulding, J. D. Wilson and others.

New Orleans, La.—Merchants' Ice Co. incorporated with \$60,000 capital stock; N. W. Wilburn, president; Maury Wilburn, vice-president; Walter A. Taylor, secretary-treasurer.

San Marcos, Texas.—San Marcos Utilities Co. incorporated with \$300,000 capital stock by V. L. Brooks and others. (See "Miscellaneous Manufacturing Plants.")

IRON AND STEEL PLANTS

Birmingham, Ala.—Iron Furnace.—Williamson Furnace Co. will blow in its Williamson furnace on August 1; furnace has been relined and repaired at cost of \$10,000, and will have daily capacity of 125 tons pig-iron; B. P. Wilson, Jr., 623-26 First National Bank Bldg., manager and engineer in charge. (Recently mentioned.)

Birmingham, Ala.—Iron Furnace.—Tennessee Coal, Iron & Railroad Co. will remove chills from casthouse at Alice Furnace, and put furnace in blast on foundry iron as soon as casthouse is prepared, which will probably be about August 1.

Birmingham, Ala.—Iron Furnace.—Southern Iron & Steel Co. has begun cleaning Trusville furnace for relining, preparatory to blowing in; contemplates daily output of 175 to 200 tons of iron.

Chattanooga, Tenn.—Iron Furnace.—Citico Furnace Co. is relining furnace and will be ready for operation about August 1.

Gadsden, Ala.—Steel Rod and Wire Mills, etc.—Southern Iron & Steel Co., Birmingham, Ala., telegraphs the Manufacturers' Record it will rebuild Gadsden rod and wire mills; will double capacity, increasing to 350 tons wire nails and fencing; has awarded contracts for machinery; will begin construction at once; brick and steel buildings; approximate cost, \$1,000,000.

Holt, Ala.—Iron Furnace.—Central Iron & Coal Co. has relined iron furnace and will resume operation by August 1; New York office at 37 Wall street.

St. Louis, Mo.—Iron Furnace.—Ruby Mountain Iron & Furnace Co., 209 North 11th St., recently reported incorporated with \$100,000 capital stock, plans to build blast furnace in connection with development of iron-ore properties. William H. Baumann is president. (See "Mining.")

LUMBER-MANUFACTURING PLANTS

Bluefield, W. Va.—Hardwood Lumber & Mining Co., R. H. Angell, president, Roanoke, Va., is negotiating sale of its 6000-acre tract timber on Laurel Creek. If sale is not completed, will build two mills, each with daily capacity of 25,000 feet lumber.

Boston, Ga.—W. A. Parker and others have organized company to establish plant to manufacture lumber, laths and shingles. (See "Machinery Wanted.")

Bradford County, Fla.—Sax Lumber Co., New York, has purchased about 10,000 acres of timber land in Bradford and Clay counties, and has sold timber on tract to Starke

Lumber Co., Starke, Fla., who will build tramroad and establish mill.

Brownfield, Texas.—Kirby Lumber Co. will rebuild circular and band mill, drykilns, etc., recently reported burned; loss was \$300,000; B. F. Bonner, general manager, Houston, Texas. (See "Machinery Wanted.")

Cass, W. Va.—Deer Creek Lumber Co., recently reported incorporated with \$75,000 capital stock, will erect mill-construction buildings costing \$15,000 and equip with sawmill machinery for plant of 50,000 feet daily capacity; J. F. Torbert, president; L. T. Brandon, secretary; C. S. Harter, treasurer and superintendent.

Charleston, S. C.—Standard Railroad Crosstie Co. incorporated with \$4000 capital stock by Henry A. M. Smith and W. B. Chisolm.

Charleston, S. C.—Southern Mahogany Co. incorporated with \$300,000 capital stock by D. L. Dwight and W. L. Harris.

Clarksdale, Miss.—Chilhowie Lumber Co. incorporated with \$10,000 capital stock by M. S. Williams, R. H. Wildberger, A. N. Beatie and others.

Clayton County, Ga.—Ransom-Lomax Lumber Co. organized with \$50,000 capital stock by Sam A. Ransom, A. B. Ransom, W. J. Cude and others, all of Nashville, Tenn.; purchased 3000 acres of timber land in Clayton county and will establish two sawmills.

Dothan, W. Va.—P. M. Snyder, Mt. Hope, W. Va., has purchased timber on holdings of Loup Creek Colliery Co.'s holdings in Fayette county, estimated to cut 7,000,000 feet; will establish band mill with capacity of 25,000 feet daily.

Dubach, La.—Dubach Lumber Co. incorporated with \$150,000 capital stock; George W. James, president; M. L. Fleishel, vice-president; A. H. Wacker, secretary; T. L. James, treasurer; will establish sawmill and planer.

Fivay, Fla.—Aripeka Sawmills, T. H. Martin, manager, will build two additional mills at cost of \$250,000 each; operates two double band mills with daily capacity of 150,000 feet timber; planing mill with daily capacity of 75,000 feet, etc.; steam-power plant; electric lighting, etc.

Foss, Ark.—Tannehill & Haines will build sawmill with daily capacity of 25,000 feet lumber; have equipment; cost of plant, \$25,000.

Houston, Texas.—McMurry Lumber Co. incorporated with \$150,000 capital stock by John McMurry, Thomas C. Spencer and C. B. Spencer.

Houston, Texas.—Thompson Bros. Lumber Co. has increased capital stock from \$600,000 to \$2,100,000; will purchase 500,000,000 feet of timber in Trinity county and erect mill to cost \$300,000 with capacity of 100,000 feet daily; also plans to build town and erect 250 dwellings.

Lafayette, La.—Red Cypress Shingle Co. organized with M. D. Diferes, Lafayette, president; J. W. Crouse, Lafourche, La., vice-president; B. A. Mercenen, New Iberia, La., secretary-treasurer; will establish plant with capacity of 100,000 shingles daily.

Lake Charles, La.—Texas Cressoting Co., Texarkana, Texas, is negotiating for 15,000,000 feet of standing timber on Beckworth Creek, and proposes establishment of mill with capacity of 25,000 to 50,000 feet daily.

Lawton, Okla.—Hollem-Truitt Lumber Co. incorporated with \$20,000 capital stock by C. L. Hollem, J. B. Truitt and Lulu Truitt.

Luray, Va.—Heiston-Miller Company incorporated with \$25,000 capital stock; V. H. Ford, president; F. W. Grove, secretary-treasurer.

Midlothian, Md.—McNitt-Huyett Lumber Co., Nittany, Pa., has purchased timber tract and will establish mill.

Mobile, Ala.—Mobile Timber Co. incorporated with \$125,000 capital stock by R. G. Haynes, M. C. Moore and Victor L. Brown.

Norfolk, Va.—C. R. Johnson Lumber Co. incorporated with \$300,000 capital stock; C. R. Johnson, president; A. B. Johnson, secretary.

Pyrilton, Ala.—Shin Bone Valley Iron & Timber Co. will arrange for development of 25,000 acres timber land, mostly long-leaf yellow pine. (See "Mining.")

Roanoke, Va.—Leonard Bros. will repair sawmill reported burned.

Rochelle, La.—Bradford-Hoskins Lumber Co. will establish mill.

San Antonio, Texas.—Albert Rine Lumber Co. incorporated with \$25,000 capital stock by Albert Rine, Gus Zalmazig and George B. Tallafarro.

Sewell, W. Va.—Sewell Lumber Co. is arranging to begin operations of 60,000 feet capacity mill, to develop tract estimated to cut 60,000,000 feet of timber.

Springfield, La.—G. H. A. Thomas Com-

pany will rebuild sawmill reported burned; loss \$25,000.

Tampa, Fla.—American Mahogany Co., Chicago, Ill., is understood to be completing arrangements for construction of extensive saw and veneer mills for handling cedar and mahogany lumber; latter to be shipped from Honduras, where company controls extensive tracts; mill buildings of concrete and steel; entire plant to cost \$250,000.

Vanndale, Ark.—York Lumber Co. incorporated with \$25,000 capital stock by James N. Hall, William Taylor and John Winsor.

Waco, Texas.—Citizens' Lumber Co. has increased capital stock from \$28,000 to \$53,000.

Washington, N. C.—Washington Lumber Co. incorporated with \$6000 capital stock by J. R. Kessinger, W. F. Harrell and Larry I. Moore.

Winchester, Ky.—H. G. Garrett, Winchester, and John H. Hardwick, Staunton, Va., have organized company with \$100,000 capital stock.

Winnfield, La.—Little Pine Lumber Co., J. E. Drewett, president, recently reported incorporated with \$25,000 capital stock by John H. Magee, with 30,000 feet daily capacity; no further equipment needed.

MINING

Birmingham, Ala.—Iron.—South Highlands Iron Co. incorporated with \$3300 capital stock by Hinton E. Carr, O. L. Stephenson, Joseph C. Hall and Byron H. Kelley.

Carthage, Mo.—Lead and Zinc.—Texahoma Mining Co. incorporated with \$36,000 capital stock by E. E. Gordon, R. A. Mooneyhan, Ed Hlatt and others.

Carthage, Mo.—Lead and Zinc.—Big Slope Mining & Development Co. incorporated with \$100,000 capital stock by John H. Magee, Flora V. Magee, J. L. Moore and others.

Fayetteville, W. Va.—Simms & Cassidy have purchased John Kincald property and will develop for mineral deposits.

Joplin, Mo.—Lead and Zinc.—Independence Lead & Zinc Co., Box 350, recently reported incorporated with \$50,000 capital stock, has property about nine acres in extent; plant equipped; capacity of mill, 100 tons per 10 hours; Roy Osborne, Montgomery county, president; Grant Alexander, same address, vice-president; W. E. Welpe, secretary-treasurer and present manager.

Macon, Mo.—Lead and Zinc.—Wardmore Mineral Co. incorporated with \$48,000 capital stock by Harry M. Rubey, Thomas F. Wardall, William Rea and others.

Mangum, Okla.—Salt.—Reported that stock company will be organized by T. H. Gilliland and others to develop salt springs near Mangum.

Pyrilton, Ala.—Iron, Manganese, Graphite, etc.—Shin Bone Valley Iron & Timber Co. will be organized with capital stock of \$600,000 by R. F. Kolb and O. M. Alexander of Anniston, Ala.; W. B. Davidson of Montgomery, Ala.; P. M. Clark and C. W. Huffman of Lebanon, Tenn., and others of Boston; acquired brown ore manganese, graphite, mica and kaolin properties in Shin Bone Valley and 25,000 acres timber land, mostly long-leaf yellow pine; will construct railway 16 miles long from Abel to Pyrilton, on Atlanta, Birmingham & Atlantic Railroad, and later may extend from Abel to Doornondville, on Southern Railway; will soon begin mining and arrange for timber developments; J. D. Hunter, Anniston, Ala., company's engineer in charge.

Rush, Ark.—Zinc.—Red Cloud Zinc Co., Isaac Reese, president, recently reported incorporated with \$50,000 capital stock, continues operation of mines on Buffalo River; present capacity 400 tons per 24 hours; contemplates erection of additional mills; Chas. Le Vasseur, mining engineer and superintendent.

St. Louis, Mo.—Iron.—Ruby Mountain Iron & Furnace Co., 209 North 11th St., William H. Baumann, president, will develop iron properties; will install ore washers and considerable mining equipment. (See "Iron and Steel Plants.")

MISCELLANEOUS CONSTRUCTION WORK

Augusta, Ga.—Canal.—Bids will be opened August 17 for excavating drainage canal about three and one-half miles long 30 feet wide and 6 feet deep; F. B. Pope, chairman Canal and River Commission; Nisbet Wingfield, chief engineer. (See "Machinery Wanted.")

Chicot County, Ark.—Levee.—Bond Commissioners, Tenness Basin Levee District, Rayville, La., awarded contract to Lacey Bros., Arkansas City, Ark., at 16.45 cents

per cubic yard, to construct Gaines Landing Levee, in Chicot county; 210,000 cubic yards. (Recently mentioned.)

Dardanelle, Ark.—Levee.—City will construct 35,000 cubic yards levee embankment, reinforced concrete lock and dam and 10 reinforced culverts, varying in length from 50 to 100 feet; bids to be opened August 16; J. A. Croom, president Levee District No. 1 of Yell county; Thomas Boles, chief engineer, Fort Smith, Ark. (See "Machinery Wanted.")

Galveston, Texas.—Pier.—Galveston Fishing & Amusement Co., J. C. Gonzales, manager, will rebuild fishing and amusement pier destroyed by recent storm at loss of \$16,500.

Glen Jean, W. Va.—Tunnel.—McKell Coal & Coke Co. will construct tunnel 1000 feet long in connection with building three miles of railroad, contract for which has been awarded W. O. Lipscomb, Roanoke, Va.

Jacksonville, Fla.—Docks.—W. M. Mason Forwarding Co. invites bids on construction of lumber docks on property leased in front of warehouse No. 1 of Merchants & Miners' Transportation Co. Specifications can be obtained from W. M. Mason, Jr., of Mason company.

Memphis, Tenn.—Levee.—Charles W. Little, Caruthersville, Mo., has contract at 16.24 cents per cubic yard for 90,000 cubic yards levee enlargement in upper St. Francis levee district; M. L. Walker, Major, Engineers, U. S. Engineer Office, Custom-house, Memphis. (Recently mentioned.)

New Orleans, La.—Levee.—Orleans Levee Board awarded contract to Hercules Co., Ltd., for construction of Carrollton Levee and revetment; levee will have base of 230 feet, 17 feet high, with slope of 10 to 1 on river side and 3 to 1 on city side; length 10,382 feet, and will contain 400,000 cubic yards of earth and 265,000 feet, board measure, creosoted cypress lumber for revetment; cost about \$150,000. Arsene Perrilliat is company's consulting engineer. (Recently mentioned.)

Tallahassee, La.—Drainage.—Canal Bayou Drainage District has been organized, with G. P. Blair, representative of Caldwell & Smith, Memphis, Tenn., as president, and J. N. Harvey, secretary; district comprises about 30,000 acres; will vote September 14 on levying of tax and issuance of bonds to amount of \$40,000. (Recently mentioned.)

MISCELLANEOUS ENTERPRISES

Alexandria, La.—Grain Elevator, etc.—Alexander Mill & Elevator Co., A. V. Neilson, president, has purchased machinery for elevator and mill recently described.

Asheville, N. C.—Land Improvement.—Chestnut Ridge Park Co. incorporated with \$15,000 capital stock by George S. Powell, J. E. Ray and others.

Atlanta, Ga.—Land Development.—W. J. Davis will develop 10½ acres of land; will grade, make other improvements and erect number of dwellings.

Baltimore, Md.—White Automobile Co. organized with H. M. Rowe, 21 West Fayette St., president; J. S. Detrick, 508 East Preston St., vice-president; L. T. Appold of Colonial Trust Co., Saratoga and Charles Sts., secretary-treasurer; Frank W. Darling, 26 Franklin Bldg., general manager; has taken over White Garage Co.; will continue to use garage at Biddle street and Park avenue, and will erect \$35,000 garage and sales-room on Mt. Royal avenue.

Baltimore, Md.—Land Improvements.—The Essex Company has begun development of 1500 acres of land recently purchased; initial development comprises 100 acres divided into more than 400 building sites; will provide avenues, sidewalks, alleys, etc.; will arrange for lighting facilities, water supply, sewerage disposal, etc., and may install local water-works; land located in Baltimore county east of city on new State highway; Reding & Howard, 11 East Lexington St., Baltimore, and Cleveland, Ohio, landscape engineers in charge; R. B. Pue, Central Savings Bank Bldg., Charles and Lexington Sts., Baltimore, is developing property for company and can give information.

Baltimore, Md.—Electrical Contractors.—Brace Electric Co. incorporated by John Payton, 1620 West Fayette St.; John Krashaar and R. Contee Rose, 202 North Calvert St.

Baltimore, Md.—Contracting.—Maryland Building & Contracting Co. incorporated by David E. Potter, 711 First Ave. N.; Joseph H. King, 212 North Paca St., and Arthur M. Easter, 22 East Lexington St.

Bruceville Mills, W. Va.—Land Development.—Mountain Park Land Co. incorporated with \$100,000 capital stock by Frank E. Carver, Brandenville, W. Va.; Frederick W. Schneidlenheim, Connelville, Pa.; Wm. S.

Downs, Kingswood, W. Va., and Ross M. Reigel, Harrisburg, Pa.

Center, Texas.—Hardware, etc.—Center Hardware-Furniture Co. incorporated with \$15,000 capital stock by W. D. Morgan, W. L. Norris and N. B. Atkins.

Coldwater, Miss.—Plows.—A. G. Perry Plow Co. incorporated with \$50,000 capital stock by A. G. Perry, J. D. Turley and others.

Corsicana, Texas.—Export.—Navarro County Export Co. incorporated with \$50,000 capital stock by D. Heidenheimer, A. F. Wood and A. Levy.

Dallas, Texas.—Dairy.—Thos. Field, 255 Main St., contemplates establishment of dairy on trolley line between Dallas and Fort Worth; may also install 10 to 15-ton ice machine.

De Leon, Texas.—Printing Plant.—De Leon Free Press will erect printing plant; two stories; brick.

Denison, Texas.—Land Improvement and Live-stock.—Nueces Land & Live-stock Co. incorporated with \$100,000 capital stock by J. T. Munson, L. B. Moore, M. T. Mathes and others.

Dinsmore, Fla.—Land Development.—Samuel B. Hubbard, Frank S. Gray, Joseph R. Dunn, all of Jacksonville, Fla., and William Macklin, Dinsmore, have purchased and will develop several thousand acres of land. It is planned to divide into farms of 10 to 40 acres, construct several miles of hard roads and otherwise develop property; Mr. Dunn, secretary and manager of company.

Gloster, Miss.—Pleasure Resort, etc.—W. O. W. Health and Pleasure Resort and Sanitarium will be established by O. P. McPherson, president, and others; company proposes to erect structures ranging from \$150 cottages to \$5000 dwellings, erect hotels and conduct annual "Chautauqua," etc.; plans for buildings by S. D. Wilkinson, Gloster, Miss.; N. B. McLean and D. N. Lawrence also interested.

Greenwood, Miss.—Cotton.—Luckett-Sabine Cotton Co. incorporated with \$10,000 capital stock by W. R. Luckett, W. C. Waggener, Jr., both of Vicksburg, Miss., and R. F. Sabin, Greenwood.

Harrisonburg, Va.—Electrical Assembling and Supplies.—New England Electrical Co., H. W. Lawrence, president, Denver, Col., contemplates establishment of plant for assembling electrical devices, etc., and to deal in electrical supplies.

Hot Springs, Va.—Automobiles and Livery.—Hot Springs Automobile & Livery Co. incorporated with \$10,000 capital stock; E. E. Warren, president; T. W. Jordan, vice-president; J. W. Harper, secretary-treasurer.

Houston, Texas.—Orchard.—Algon Orchard Co. incorporated with \$10,000 capital stock by Frank Putnam, R. J. McHugh and A. S. Caldwell.

Jackson, Miss.—Contracting.—River, Rail & Harbor Construction Co. organized with \$500,000 capital stock by R. V. Powers, Julius Crisler, W. A. Montgomery and others; to promote use of Kerr gabion process for construction, restoration, repair and reclamation of embankments of waterways, harbors, rivers, etc., invented and patented by Charles Kerr.

Jacksonville, Fla.—Naval Stores.—Mattox-McMillan Company incorporated with \$100,000 capital stock; R. W. Mattox, West Tocot, Fla., president; D. H. McMillan, vice-president; P. L. Sutherland, secretary and treasurer, both of Jacksonville.

Jonesboro, Tenn.—Land Improvement.—Erwin Land Co. incorporated with \$30,000 capital stock by Thad A. Cox, George C. Sells, E. J. Vaught and others.

Joplin, Mo.—Construction.—Nolan-Draper Construction Co. incorporated with \$15,000 capital stock by Gilbert Barbe, Thos. C. Nolan and George E. Draper.

Kansas City, Mo.—Asphalt Paving Repair Plant.—City awarded contract at \$29.35 to Warren Asphalt Co., Boston, Mass., for asphalt paving repair plant recently mentioned.

Kansas City, Mo.—Heating.—Waterman-Waterbury Heating Co. incorporated with \$50,000 capital stock by J. L. Waterbury, H. W. Gills and D. C. Simrall.

Knoxville, Tenn.—Transfer and Storage.—Edelen Transfer & Storage Co. incorporated with \$10,000 capital stock by J. W. Edelen, J. L. Doven, R. J. Stephenson and others.

Little Rock, Ark.—Land Improvement.—Gloria Wells Land Co. incorporated with \$25,000 capital stock by C. C. Warren, John B. Goodrich, G. H. Clarke and others.

Louisville, Ky.—Coal.—Frank G. Jones & Co. incorporated with \$25,000 capital stock

by Frank G. Jones, Alfred Adler, A. W. Jones and C. L. Starr.

Louisville, Ky.—Land Improvement.—Arcade Realty Co. incorporated with \$100,000 capital stock; M. W. Burd, secretary. (See "Miscellaneous Structures.")

Louisville, Ky.—Construction.—Falls City Construction Co. incorporated with \$50,000 capital stock by W. N. Cox, H. P. Lewman and M. P. Micol.

Lynchburg, Va.—Fruit Cultivation.—Montrose Fruit Co. incorporated with \$100,000 capital stock; W. G. Stevens, president, general manager and treasurer; William Beasley, secretary.

Magnolia, Ark.—Land Improvement.—Magnolia Springs Co., D. E. Smith, president, recently reported incorporated with \$25,000 capital stock, will develop 120 acres for health and pleasure resort; contemplates concrete work, grading, building, etc.; engineer not yet employed; address for six months, Magnolia; later address, Magnesia.

Memphis, Tenn.—Contracting, Paving.—Koehler Paving & Concrete Co. incorporated with \$10,000 capital stock by Paul Koehler, W. A. Percy and O. W. Fowler.

Muskogee, Okla.—Reduction.—Producers' Reduction Co. incorporated with \$12,000 capital stock by Mex E. Moore, Louis B. Elyen, Ralph W. Lettwich and others.

Muskogee, Okla.—Printing.—Democratic Printing & Publishing Co. incorporated with \$5000 capital stock by S. J. Redman, Wm. F. Garniee and H. G. Sarnee.

Muskogee, Okla.—Nursery.—Hyde Park Nursery Co. incorporated with \$25,000 capital stock by C. L. Stone, J. H. Elton, W. D. Ford and W. S. Hursla.

Nashville, Tenn.—Publishing.—Everybody's Directory Publishing Co. incorporated with \$20,000 capital stock by James W. Bryan, E. W. Jennings, E. B. Whiteside and others.

Natchez, Miss.—Grain Elevator.—T. B. Postlethwaite contemplates erection of grain elevator.

New Orleans, La.—Land Improvement.—Greater Louisiana Land & Development Co. incorporated with \$200,000 capital stock by John Luzzza, R. B. Hurst and Theo. Ciacio.

Newton, Miss.—Hardware.—J. H. Collier Hardware Co. incorporated with \$10,000 capital stock by J. H. Collier, George A. Alexander and others.

Norfolk, Va.—Land Improvement.—Algonquin Park Corporation incorporated with \$50,000 capital stock; Fergus Reid, president; T. A. Jones, vice-president; J. S. Jenkins, secretary-treasurer.

Norfolk, Va.—Printing.—H. J. Garnett Printing Co. incorporated with \$10,000 capital stock; H. J. Garnett, president; E. J. Garnett, secretary; I. A. Garnett, treasurer.

Ocean Beach (not a postoffice), Va.—Park, etc.—Capital City Beach Corporation, 921 Mutual Bldg., Richmond, Va., incorporated with \$25,000 capital stock; Thos. P. Bryan, president; Edgar G. Gunn, vice-president; A. M. Gover, secretary-treasurer; will develop residence resort or park on water front near Old Point, Va., to be called "Ocean Beach;" will soon ask bids on sewers, grading and granolithic sidewalks; will erect cottages at cost of \$2000 and upward.

Oklahoma City, Okla.—City is having plans prepared by Rudolph & Herring, New York, for proposed incinerator plant. (Mentioned in May.)

Oklahoma City, Okla.—Land Improvement.—Blackwelder Place Co. incorporated with \$75,000 capital stock by J. A. Franklin, B. A. Hall, W. G. Bisbee and others.

Oklahoma City, Okla.—Land Development.—Gas Heights Development Co. incorporated with \$30,000 capital stock by F. L. Gast, Edwin Bancroft and F. B. Owen.

Oklahoma City, Okla.—Grain Elevator.—J. H. Pruitt Grain Co. incorporated with \$50,000 capital stock; J. H. Pruitt, Lindsay, Okla., president; J. W. Dixon, Oklahoma City, secretary-treasurer; will erect grain elevator.

Oklahoma City, Okla.—Land Improvement.—Queen City Development Co. incorporated with \$5000 capital stock by J. S. Anderson, B. L. Woodworth and R. A. Nelson.

Portsmouth, Va.—Land Improvement.—Mutual Land Corporation incorporated with \$50,000 capital stock; C. R. Welton, president; Winston Parrish, vice-president; J. C. Parrish, secretary-treasurer.

Savannah, Ga.—Cotton Exporting.—Teasdale Cotton Exporting Co. incorporated with \$10,000 capital stock by Wm. H. Teasdale, Albert Howarth and Geo. J. Quint.

Statesville, N. C.—Land Development.—Takoma Land Co. incorporated by R. H. and J. W. McNeill, both of Washington, D. C.

St. Joseph, Mo.—Automobiles.—Robinson Auto & Supply Co. incorporated with \$10,000

capital stock by W. H. Robinson, E. A. King, R. H. Calkins and others.

St. Louis, Mo.—Electric Fixtures, etc.—C. F. O'Reilly Electric & Fixture Co. incorporated with \$2500 capital stock by C. F. O'Reilly, Clara M. O'Reilly and Charles Duepner.

St. Louis, Mo.—Land Development.—Kaessmann-Rivers Development Co. incorporated with capital stock of \$10,000 by Hermann Kaessmann, Niotaze, Kans.; Julian H. Rivers, M. Koessner and others of St. Louis.

St. Louis, Mo.—Electric Fixtures.—C. F. O'Reilly Electric & Fixture Co. incorporated with \$2500 capital stock by Charles Duepner, C. F. O'Reilly and Clara M. O'Reilly.

St. Louis, Mo.—Publishing.—John W. Corley Publishing & Promotion Co. incorporated with \$50,000 capital stock by John W. Corley, Effie U. Corley and Robert F. Corley.

Sulphur, Okla.—Publishing.—News Democrat Printing & Publishing Co. incorporated with \$5000 capital stock by S. J. Redman, William F. Granlee and Helen Granlee.

Thomasville, Ga.—Laundry.—B. Edwards awarded contract to Henry Arnold, Thomasville, for erection of steam-laundry building; brick; 80x100 feet; mill construction; reported to install additional machinery.

Vidalia, La.—Grain Elevator.—Fred Postlethwaite, Natchez, Miss., will establish grain elevator.

Waco, Texas.—Land Improvement.—Foster Heights Land Co. incorporated with \$8000 capital stock by W. H. Ross, J. S. Perry and F. L. Dennison.

MISCELLANEOUS MANUFACTURING PLANTS

Ablene, Texas.—Implements.—Dudley Implement & Manufacturing Co., recently reported incorporated with \$25,000 capital stock, is not ready to announce plans; A. H. Kirby, president; Morgan Weaver, vice-president; W. McCullough, treasurer; J. B. Heltschew, secretary; T. J. Dudley, superintendent.

Anderson, S. C.—Fertilizer.—Anderson Phosphate & Oil Co., J. R. Vandiver, president, will overhaul machinery, install new acid chambers, furnaces, etc., in fertilizer plant and in future use bin system for manufacturing fertilizer. (Previously noted.)

Atlanta, Ga.—Beverages.—Coca-Cola Co. awarded contract to Arthur Tufts, Atlanta, for erection of plant previously noted; reinforced concrete; cost \$40,000.

Atlanta, Ga.—Automobiles.—V. H. Kriegshaber and others have organized company to establish plant for manufacturing automobiles.

Baltimore, Md.—Glass.—Wm. H. Grafflin, 225 East German St., purchased plant of Nivison Glass Co.; has not yet made definite plans for operation.

Baltimore, Md.—Yachts.—Nilson Yacht Building Co., L. J. Nilson, proprietor, Ferry Bar, Baltimore, recently noted to rebuild burned plant, will erect wood and corrugated iron structure; plans by Mr. Nilson; will install woodworking and machine shop equipment, with electric power; manufactures yachts. (See "Machinery Wanted.")

Baltimore, Md.—Drugs and Chemicals.—Jarvis Drug & Chemical Co. incorporated with \$50,000 capital stock by Harry C. Jarvis, 400 Park Ave.; J. Wright Naylor, Wm. E. Michael, 462 West Mulberry St., and Walter I. Dawkins, Fidelity Bldg.

Baltimore, Md.—Bottle Fillers.—Brodie Bottle Filler Co. incorporated with \$5000 capital stock by James K. Painter, 2025 West North Ave.; Wm. G. Brodie, 2017 West North Ave.; Chapin Ferguson and Carol Ferguson.

Baltimore, Md.—Roofing, Paint, etc.—Clarke Asphalt Roofing & Paint Co. incorporated with \$5000 capital stock by Addison H. Clarke, 319 West Pratt St.; Katherine A. Clarke and Anna T. Walters.

Belhaven, N. C.—Overalls and Shirts.—Belhaven Overall & Shirt Manufacturing Co. incorporated with \$50,000 capital stock by W. H. Olden and others.

Birmingham, Ala.—Plumbers' and Mill Supplies.—Jefferson Plumbers' & Mill Supply Co. incorporated with \$25,000 capital stock; C. H. Colvin, president; J. J. Lee, secretary-treasurer.

Blackstone, Va.—Tobacco.—Blackstone-Virginia Tobacco Co. incorporated with \$25,000 capital stock; M. A. Jones, president; J. P. Irby, vice-president; C. H. Hardy, secretary-treasurer; will erect 50x150-foot building at cost of \$7000; order placed for machinery costing \$8000; daily capacity, 30,000 pounds tobacco.

Bristol, Va.—Tenn.—Rectifying.—E. Gouge contemplates establishment of plant for whiskey rectifying.

Charleston, W. Va.—Wrenches.—Eugene Cullis and Fred E. Sands, formerly of Tremont Manufacturing Co., Boston, Mass., are planning purchase of Baldwin Steel Co. plant and to change it to wrench factory.

Charlotte, N. C.—Farm Implements.—Cole Manufacturing Co. will erect six buildings, including foundry; reinforced concrete fireproof construction; plans by Hook & Rogers, Charlotte; electric lighting; freight elevator; cost \$50,000 to \$60,000; date of opening bids not set; manufacture harvester and farming implements.

Chattanooga, Tenn.—Shoes.—R. M. Rose and Michael O'Grady are interested in establishment of \$150,000 shoe factory.

Cumberland, Md.—Glass.—Wellington Glass Co. organized with \$50,000 capital stock; George L. Wellington, president; John P. Schellhaus, vice-president; Matthew H. Sloan, secretary-treasurer; recently noted as having purchased and to re-equip, repair furnace, remove sprinkler system and operate plant of National Glass Co.

Daphne, Ala.—Creamery.—A. E. Strong and W. G. Brandenberg will establish creamery and ice plant.

Frederick, Md.—Concentrated Milk.—Baltimore & Washington White Cross Milk Co., E. L. Cockrell, president, Bond Bldg., Washington, D. C., will establish plant and erect buildings recently mentioned; structure to be fireproof, 60x80 feet, costing \$10,000; plans by Mr. Lenny, Frederick; cost of machinery, \$25,000; daily capacity, 30,000 gallons concentrated milk.

Gadsden, Ala.—Gas Plant.—Tri-City Gas Co., Thomas H. Stephens, vice-president, will resume construction of proposed gas plant to cost \$75,000.

Hagerstown, Md.—Bottle Caps.—Hagerstown Cap Co. incorporated with \$25,000 capital stock by Clarence C. Parket, Edward L. Seigman, Fred. G. Bester and others.

Joplin, Mo.—Signs.—Western Sign Works Co. increased capital stock from \$10,000 to \$20,000.

Lakeside, P. O. Eagle Lake, Texas.—Rice Mills.—John Razoz, manager Lakeside Canal Co., will overhaul rice mills damaged by storm.

Lexington, Ky.—Mead Manufacturing Co., Richwood, Ohio, Joseph B. Hornes, Williams-town, Ky., president, contemplates establishment of plant.

Lexington, Ky.—Tobacco.—Vaughan-Cunningham Tobacco Co. (J. R. Cunningham, T. N. and S. T. Vaughan) will establish tobacco factory previously mentioned; will erect brick and stone building 60x225 feet at cost of \$22,000; will install drier, 150-horsepower boiler, 50-horsepower engine, etc.; cost of machinery, \$15,000; daily capacity, 100,000 pounds of redried tobacco. (See "Machinery Wanted.")

Louisville, Ky.—Chemical Preparations, etc.—Louisville Chemical Co., 594 W. Green St., recently reported incorporated with \$50,000 capital stock, will establish plant to manufacture chemical and pharmaceutical preparations; will erect \$25,000 fireproof building; size 100x200 feet; Dr. G. W. Lawrence, president; W. M. Viser, vice-president; G. L. Webb, secretary-treasurer.

Louisville, Ky.—Soap.—Magic Soap Co., organized by J. H. Haag, New Orleans, La., has secured site and building, and will expend \$15,000 for improvements and equipment.

Memphis, Tenn.—Chemicals.—Chickasaw Chemical Co. incorporated with \$25,000 capital stock by Jacob Voorheis, M. W. Voorheis, C. M. Renkert and others.

Nacogdoches, Texas.—Tobacco.—Taussig & Co., Chicago, Ill., have leased building and will equip as tobacco packing and curing house.

Natchez, Miss.—Rice Mill.—Concordia Oil Mills, Vidalia, La., will build rice mill.

Newbern, N. C.—Shoes.—Company organized with James R. Gillespie, president; J. T. Havens, vice-president; Alexander Stanley, secretary; H. P. Kennedy, treasurer; will establish shoe factory.

New Martinsville, W. Va.—Glass.—New Martinsville Glass Co. awarded contract to Dayton & Francis, New Martinsville, for addition to plant, 40x60 feet.

New Orleans, La.—Drugs.—Aschaffenberg Drug Co. incorporated with \$50,000 capital stock by J. Loeffler, A. Aschaffenberg and A. H. Kussman.

Quana, Texas.—Creamery.—Establishment of \$6000 creamery is contemplated. Address C. Hagelstein, secretary Commercial Club.

Paducah, Ky.—Stemmary.—John Hodge, Henderson, Ky., will erect brick structure and equip as tobacco stemmary.

Reidsville, N. C.—Tobacco.—Reidsville Co-Operative Tobacco Co. incorporated with \$50,000 capital stock by P. M. Walker and others.

San Marcos, Texas.—Gas, etc.—San Marcos Utilities Co. incorporated with \$200,000 capital stock by V. L. Brooks, R. L. Batts and J. H. Hart; will purchase and maintain mills and gins, manufacture ice, gas, electric light, etc.

Seneca, S. C.—Guano.—G. W. Gignilliat and others reported to begin erection of proposed guano factory.

Sherman, Texas.—Overalls.—Sherman Over-all Manufacturing Co. incorporated with \$15,000 capital stock by Martin B. Pitts, Miller B. Pitts and S. A. Vittitoe.

St. Joseph, Mo.—Engines.—Uhlir Motor Co., 414½ Francis St., recently noted incorporated with \$100,000 capital stock to manufacture invention which is improvement on internal-combustion engines, will have patterns made for three sizes of engines and work done by piece for the present; company will assemble parts; contemplates erection of large plant next year; F. M. Uhlir, president; R. S. Graham, vice-president; H. R. Lewis, secretary; E. M. Swartz, treasurer.

St. Louis, Mo.—Paper Boxes.—All-Paper Box Co. incorporated with \$15,000 capital stock by A. E. Buder, G. Wm. Senn and R. J. Schwartz.

St. Louis, Mo.—Victor Automobile Manufacturing Co., J. F. Harrington, 3936 Laclede Ave., president, recently noted to erect \$12,000 factory building, has plans by Mr. Harrington for 15x112-foot concrete structure on which \$20,000 is to be expended this year; cost of completed building \$40,000; Mr. Widmer, 1021 Wright Bldg., St. Louis, engineer in charge.

St. Louis, Mo.—Iron Beds.—Foster Bros. Manufacturing Co., O. S. Foster, president, 1410 North 16th St., recently noted to purchase site and make improvements, will erect four-story fireproof structure; 118x106 feet; cost \$40,000; plans by Richard Irvin, Wright Bldg., St. Louis; will remove machinery from present plant.

Suffolk, Va.—Gas.—Suffolk Gas & Electric Co. incorporated with \$15,000 capital stock; W. H. Venable, president; W. W. Starke, vice-president; M. G. Mulvey, secretary-treasurer, all of Norfolk, Va.

Sulphur, Okla.—Drugs.—Artesian Drug Co. incorporated with \$20,000 capital stock by J. T. Jennings, George Slover and John T. Slover.

Tampa, Fla.—Tobacco.—Corral, Woodiska & Co. are planning erection of brick factory building to replace present structure.

Texarkana, Ark.—Fertilizer.—Farmers' Oil & Fertilizer Co. organized with \$100,000 capital stock; R. J. O'Dwyer, president; will establish fertilizer factory. (See "Cottonseed-Oil Mills.")

Tullahoma, Tenn.—J. C. Kendrick and Doak Aydelott will rebuild factory, warehouse and office building of Tullahoma Tobacco Co. reported burned; loss \$6000.

White Sulphur Springs, W. Va.—Shirts, etc.—Kern Manufacturing Co., recently reported incorporated with \$10,000 capital stock, has rented and equipped building for manufacture of shirts, etc.; H. M. Kern, president; Oscar O'Connell, vice-president; W. S. Bickel, secretary; W. B. Hines, treasurer.

Winchester, Ky.—Wedge Tools.—Amster Metallic Wedge Tool Co., Buffalo, N. Y., will, it is rumored, establish plant for finishing metallic wedge tools.

Winston-Salem, N. C.—Dental Supplies.—Piedmont Dental Supply Co. incorporated with \$5000 capital stock by Mrs. Flora Watkins, J. C. Watkins, J. H. Watkins and R. P. Reece.

Wynnewood, Okla.—Brooms and Syrup.—Wynnewood Canning and Syrup Factory, T. A. Threlkeld, proprietor, will install broom-making machinery in connection with syrup factory recently noted; broom capacity, 50 dozens daily. (See "Canning and Packing Plants" and "Machinery Wanted.")

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Kansas City, Mo.—Kansas City Southern Railway, A. F. Rust, resident engineer, awarded contract to C. L. Gray Construction Co., 918 Victoria Bldg., St. Louis, Mo., for erection of freight-house previously mentioned; structure 50x100 feet; cost \$60,000; plans by company.

Kansas City, Mo.—Kansas City Southern Railway, A. F. Rust, resident engineer, Kansas City, Mo., will spend \$250,000 in improvements to Kansas City terminals, including freight-house in West Bottoms, increased shop facilities in East Bottoms, new warehouses, etc.

Kansas City, Mo.—Kansas City Terminal Railway Co. (H. L. Harmon, president)

directors have accepted city ordinance providing for construction of depot and various extensive terminal improvements, heretofore planned, subject to referendum vote of city; plans of various railway companies for extensive terminal improvements heretofore mentioned from time to time; it is contemplated to expend total of \$20,000,000.

Macon, Ga.—Central of Georgia Railway Co. is proceeding with plant improvements heretofore reported; has completed car shop, repair tracks, power-house, reservoir, high-service tank with pumping station, etc.; expects to complete engine terminal by September 1; will contract for other work as rapidly as possible; has awarded contract for structural steel to American Bridge Co., 30 Church St., New York; erecting shop will have 22 pits with ample machinery, boiler and blacksmith shops, etc.; estimated cost of entire improvements, \$1,500,000; C. K. Lawrence, chief engineer of company, Savannah, Ga., in entire charge of work and plans.

Shreveport, La.—Kansas City Southern Railway, A. F. Rust, resident engineer, Kansas City, Mo., will increase shop facilities at Shreveport.

Taylor, Texas.—International & Great Northern Railroad, O. H. Crittenden, chief engineer, Palestine, Texas, awarded contract, it is reported, to Fischer & Lambie, Austin, Texas, to construct buildings at Taylor, including nine-stall engine-house, storeroom, blacksmith shop, car-repair shop, lumber and material yards and cotton platform; material to be mainly reinforced concrete; cost \$75,000. (Recently mentioned.)

ROAD AND STREET IMPROVEMENTS

Ashville, Ala.—St. Clair County Road Bond Commissioners, W. S. Forman, secretary-treasurer, have not set time of awarding contract for construction of six miles of road across Backbone Mountain; probable cost \$15,000; chert to be used; Charles Dew, Ashville, engineer in charge; will prepare specifications. (Recently noted.)

Atlanta, Ga.—City will open bids August 9 for paving 22,000 square yards on Decatur street with wooden blocks on concrete foundation; also 2300 square yards on Madison avenue with same material; R. M. Clayton, City Engineer. (Recently noted. See "Machinery Wanted.")

Atlanta, Ga.—R. J. Freeman, Decatur, Ga., Commissioner of De Kalb county, in conjunction with Silver Lake Land Co., has installed \$15,000 road-building plant for grading and paving Peachtree road, in De Kalb county, to Silver Lake, and later through De Kalb county to Gwinnett county line; plant furnished by Silver Lake Land Co., and upon completion of work will become property of De Kalb county.

Atlanta, Ga.—City will open bids August 9 for paving Decatur street with concrete blocks; about 22,000 yards; work to be supervised by R. M. Clayton, City Engineer. (Recently noted.)

Baltimore, Md.—State Roads Commission, John M. Tucker, chairman, Union Trust Bldg., has opened bids for construction of eight sections of State highway, aggregating 35½ miles, in Baltimore, Allegany, Carroll and other counties; bids are considered excessive and will probably be rejected. (Further facts recently stated.)

Baltimore, Md.—City will grade, curb and pave with vitrified paving blocks Stag alley, from Marion to Lexington street; bids to be opened August 4; B. T. Fendall, City Engineer. (See "Machinery Wanted.")

Beaumont, Texas.—City will open bids August 3 for paving gaps in present paving on College, Austin, Park and Pearl streets, aggregating 4120 square yards vitrified brick paving and 2873 linear feet concrete curbing; J. G. Sutton, City Secretary; C. L. Scherer, City Engineer. (See "Machinery Wanted.")

Bessemer, Ala.—City awarded contract to C. M. Burkhalter & Co., Birmingham, Ala., to lay sidewalks on Berkeley, Dartmouth and Clarendon avenues at 39 cents per yard for curbing and 82 cents for cement work; total cost, \$3,640.54.

Birmingham, Ala.—Board of Aldermen authorized purchase of equipment for street and sanitary department, which will aggregate \$15,000; Maury Nicholson, City Engineer.

Bluefield, W. Va.—City will extend and macadamize Princeton avenue. Address The Mayor.

Chattanooga, Tenn.—Noll Construction Co., 8 East 6th St., Chattanooga, is lowest bidder at about \$200,000 for construction of five miles chert roadway, with cement curbs and gutters, in Ninth ward; paving districts 1, 6, 5, 136, 55, 45, 61, 15, 68 and 44; H. F. Van

Dusen, chairman Board of Public Works. (Recently mentioned.)

El Paso, Texas.—El Paso County Commissioners will soon award contract for paving Anthony road from Hart's Mill to Couchesne, Mr. Spiecher, Government engineer, will submit plans and specifications for building 20-foot road from Couchesne pike to Anthony, distance of 17 miles. Address County Commissioners.

Elizabethton, Tenn.—City has voted issuance of \$30,000 bonds for street and sewer. Address The Mayor.

England, Ark.—Commissioners of Improvement District (R. E. L. Eagle, G. W. Morris and J. B. Jones) awarded contract to Hot Springs (Ark.) Construction Co. to construct eight miles of concrete sidewalks.

Fort Howard, Md.—Bids will be opened August 27 for construction of 15,000 square feet of granitoid sidewalks at Fort Howard; Major C. C. Ballou, United States Army, Constructing Quartermaster, 427 Customhouse, Baltimore, Md. (See "Machinery Wanted.")

Franklin, La.—City will construct 65,000 square feet cement sidewalks and 32,500 square feet brick curbing; bids to be opened August 5; John C. Lewis, Mayor. (See "Machinery Wanted.")

Franklin, La.—City will open bids August 5 for approximately 65,000 square feet cement sidewalks and 32,500 square feet (face measurement) brick curbing; later will contract additional work; John C. Lewis, Mayor. (See "Machinery Wanted.")

Gadsden, Ala.—City has awarded contract at \$41,040 for 22,000 yards of granite curbing, and at \$40,128 for concrete curbing to Graves-Matthews Paving Co., Birmingham, Ala.

Greenboro, N. C.—Guilford county will macadamize 16 miles of road. Address County Commissioners.

Hazlehurst, Miss.—Road improvements, recently mentioned, include repairs, at cost of \$2500, to clay road from Hazlehurst to Rockport road, four miles distant; six-inch gravel (from locality) to be laid.

Huntsville, Ala.—City will pave Madison street. Address The Mayor.

Independence, Mo.—Jackson county awarded contract to Davidson Bros., Kansas City, Mo., for grading road south and west from Dallas distance of 5900 feet at cost of \$3255; will invite bids for grading road from Oak Grove to Jackson-Lafayette county line, distance of one mile, and of Buckner and Grain Valley road to Hiller road. Address County Commissioners.

Jasper, Ala.—Walker county contemplates voting on \$250,000 bond issue for road construction. Address County Commissioners.

Jonesboro, Ark.—City will expend \$76,000 in paving streets in improvement district No. 5. Address The Mayor.

Key West, Fla.—City will vote on issuance of bonds for street paving. Address The Mayor.

Knoxville, Tenn.—Oldham-Getax Company of Knoxville will soon begin work on Common, Boyd's and Nash alleys, which are to be paved with brick; about 3000 yards pavement; this contract was sublet by Southern Paving & Construction Co., Chattanooga, Tenn., which was awarded original contract.

Lafayette, La.—City awarded contract to West Construction Co., Chattanooga, Tenn., to construct cement walks along Congress and Washington streets; G. A. Martin, Mayor.

Lexington, Ky.—City awarded contract to C. C. Miller & Co., Latonia, Ky., to pave North Limestone street with brick; pitch filler; Peebles Paving Brick Co., Portsmouth, Va., has contract to furnish brick. (Recently mentioned.)

Louisville, Ky.—Board of Public Works will open bids August 5 for vitrified-brick paving on Bland, Samuel and Dumesnil streets and for vitrified-brick guttering costing \$4800 on Garvin place, Chestnut, Clay, York and other streets.

Louisville, Ky.—B. C. Milner Sons Company of Louisville is lowest bidder at \$21,166.40 for paving three blocks of streets with creosoted wooden blocks, work including 2430 cubic yards excavation, 7330 square yards wood-block pavement and 1300 feet curbing; Alexander G. Bame, chairman Board of Public Works.

Marianna, Ark.—City will open bids August 5 for 13,600 square yards vitrified brick paving on five-inch concrete base, and 4000 linear feet concrete curb, etc.; J. E. Stevenson, secretary Board Commissioners; Ben C. McGehee, Little Rock, Ark., is engineer. (Recently mentioned. See "Machinery Wanted.")

Memphis, Tenn.—City opened bids July 29

for furnishing labor, tools, hauling and materials for following work: North 3d street, covering present granite pavement with sheet asphalt, 3200 square yards; South Wellington street, sheet asphalt, 4200 square yards; North and South Waldron boulevard, grading 2000 cubic yards, sheet asphalt 8500 square yards; Washington avenue, sheet asphalt, 25,000 square yards; South 3d street, vitrified brick on concrete, 11,000 square yards; 7th street, grading 3000 cubic yards; alternate bids on sheet asphalt and vitrified brick on concrete foundation, 13,400 square yards; James H. Malone, Mayor.

Montgomery, Ala.—City will open bids August 2 for street paving, estimated by City Engineer, A. R. Gilchrist, to cost as follows: Mildred street, \$9000; South Lawrence, High to Jeff Davis, \$23,000; South Lawrence, Jeff Davis to Julia, \$4850; Improvement Clitheral street, \$1650; sidewalk paving, Union street, \$300; South Lawrence, \$7750; Jefferson, \$1000; Stevenson, \$3200; East Jeff Davis, \$2800; Julia, \$2900. (Recently mentioned. See "Machinery Wanted.")

Mulkey, Okla.—Wilson township of Carter county will vote August 14 on issuance of \$10,000 of bonds for road construction. Geo. Presley, president township board directors.

Nashville, Tenn.—Board of Public Works will soon award contract for laying 2000 square yards granite sidewalk in annexed territory; W. W. Southgate, City Engineer.

Newberry, S. C.—City voted issuance of \$300,000 of bonds for road construction. Address County Commissioners.

New Orleans, La.—City opened bids July 27 for paving City Park avenue with mineral rubber asphalt; estimated cost \$175,000; W. J. Hardee, City Engineer. (Recently mentioned.)

New Orleans, La.—W. H. Douglas, New Orleans, was lowest bidder for paving of Charters street from Elysian Fields to Frenchmen street; to cost \$5000.

North Birmingham, Ala.—City will grade, macadamize, lay concrete sidewalks and gutters, granite curbs and drains on 26th street, 24th street, 19th and 20th avenues, etc.; bids to be opened July 27; A. J. Hawkins, City Engineer. (Date postponed from July 10 to July 27. See "Machinery Wanted.")

Pensacola, Fla.—City opened bids July 27 for construction of hard road, of clay and City Engineer.

Pensacola, Fla.—City will grade certain streets; work consists of excavating and hauling 8000 cubic yards material; bids opened July 28; L. E. Thornton, City Engineer.

Portsmouth, Va.—City will construct 435 square yards concrete sidewalk pavements and 1100 square yards granite block gutters on certain streets in West Park View; bids to be opened August 5; E. B. Hawks and S. T. Montague, chairman street committee; Bascom Sykes, City Engineer. (See "Machinery Wanted.")

Richmond, Va.—Bids will be opened August 5 for construction of two miles of macadam on Cary Street road; P. St. J. Wilson, State Highway Commissioner. (See "Machinery Wanted.")

Sanford, N. C.—City awarded contract to Grantham & Sutton, Greensboro, N. C., for construction of concrete sidewalks recently mentioned; material, to be furnished by city, has been ordered.

Spartanburg, S. C.—Spartanburg county will vote on issuance of \$400,000 of bonds for road construction. Address County Commissioners.

Tazewell, Va.—S. Walton, Falls Mills, Va., has contract at about \$4500 per mile to construct six and one-half miles of road in Tazewell county.

Towson, Md.—Baltimore County Commissioners awarded contract to P. Flanagan & Sons, Lexington and Calvert Sts., Baltimore, to pave 1st street, Canton, with vitrified brick on concrete base. (Recently mentioned.)

Tulsa, Okla.—City will receive bids on brick, asphalt and bitulithic paving (45,000 square yards) until August 3; plans, etc., on file at office of City Engineer; E. B. Cline, City Auditor.

Vicksburg, Miss.—City will pave Cherry street with asphalt, bitulithic or other material; bids to be opened September 6; C. R. Twiss, City Engineer; J. J. Hayes, Mayor. (See "Machinery Wanted.")

West Blocton, Ala.—City will open bids July 30 for certain grading, curbing, macadamizing and brick gutters; Totten & Ohl, City Engineers, Birmingham, Ala. (See "Machinery Wanted.")

Winston-Salem, N. C.—G. E. Webb, R. C. Norfleet and others are interested in con-

struction of road from Walnut Cove to Piedmont Springs; estimated cost \$50,000.

SEWER CONSTRUCTION

Beaumont, Texas.—City is considering voting August 31 on issuance of \$75,000 of bonds for extension of sewer system. Address The Mayor.

Canyon City, Texas.—City voted bond issue of \$25,000 for sewerage system and water-works; sewer system to include 28,200 feet 6, 8, 10 and 12-inch vitrified sewer main, septic tank, etc.; A. F. Mantz, engineer.

Corsicana, Texas.—City is considering extension of sewer system. Address The Mayor.

Dallas, Texas.—Board of City Commissioners decided upon construction of storm sewer on East Elm street. J. M. Preston, City Engineer, will prepare plans, and J. B. Winslett, City Secretary, will invite bids; estimated cost \$19,436.12.

Dallas, Texas.—Board of Municipal Commissioners awarded contract to Ockander Bros. of Dallas at \$7750 to construct 6000 feet of sanitary sewer of 8 to 12-inch size; this will later connect with large sewer to extend through South Dallas from Fair Park to Trinity River.

Elizabethton, Tenn.—City has voted issuance of \$30,000 bonds for sewer and street improvements. Address The Mayor.

Georgetown, Texas.—Georgetown Sewer Co. (not "city") will make improvements to sewer system recently mentioned; small extensions.

Jellico, Tenn.—City voted \$45,000 bond issue for construction of sewer system; S. B. Snyder, Mayor. (Recently mentioned.)

Louisville, Ky.—Commissioners of Sewerage, Equitable Bldg., will open proposals August 6 for construction of section B of Western Interceptor; contract No. 49; portion of comprehensive system heretofore mentioned; unreinforced concrete sewer 3 feet 6 inches and 5 feet in diameter; 4000 feet long; 12 to 15 feet deep; including 1875 cubic yards concrete; consulting engineer, Harrison P. Eddy, 14 Beacon St., Boston, Mass. (See "Machinery Wanted.")

Moultrie, Ga.—City awarded contract to Dysard & Co., Atlanta, Ga., at \$14,908 for laying remainder of sewers; H. S. Jaudon, Box 582, Savannah, Ga., is engineer; W. D. Scott, Mayor. (Recently mentioned.)

Nashville, Tenn.—Board of Public Works will introduce appropriation bills amounting to \$22,000 for sewers in various parts of city; W. W. Southgate, City Engineer.

North Birmingham, Ala.—City will construct storm sewer beginning at city limits of Birmingham and ending at Village Creek and 23d avenue; same to be constructed of brick or reinforced concrete pipe and terra-cotta; bids to be opened July 27; A. J. Hawkins, City Engineer. (Date postponed from July 10. See "Machinery Wanted.")

Reidsville, N. C.—City contemplates voting on bond issue for sewer construction, etc. Address The Mayor.

Sanford, N. C.—City is considering bond issue for construction of sewer system. Address The Mayor.

San Marcos, Texas.—Sewer Company incorporated with \$45,000 capital stock by V. L. Brooks, R. L. Batts and J. H. Hart.

Vicksburg, Miss.—City will lay storm sewer on Cherry street; bids to be opened September 6; C. R. Twiss, City Engineer; J. J. Hayes, Mayor. (See "Machinery Wanted.")

Wilburton, Okla.—City voted \$25,000 bond issue for construction of sewer system. Address The Mayor.

TELEPHONE SYSTEMS

Amarillo, Texas.—Southwestern Telegraph & Telephone Co., main office Dallas, has purchased line between Amarillo and Childress and will install full copper circuit where connections will be made with present lines.

Cattlettsburg, Ky.—Boyd county has granted 20-year franchise to John Hazlett Telephone Co. to operate telephone system.

Charleston, W. Va.—Southern Bell Telephone & Telegraph Co., main office Atlanta, Ga., will expend \$35,000 for extension of lines; will construct two lines to Huntington, one to Boone coal field, Griffithsville oil field, Roane oil field, and one along Virginia Railway; also reported as having purchased People's United Telephone Co. of Buchanan and Weston, W. Va.

Dacoma, Okla.—Citizens' Telephone Co. incorporated with \$1000 capital stock by Frank B. Boorn, A. W. Lewis and W. C. Hendricks. Gillett, Texas.—Harmony Telephone Co. incorporated by William Patton, S. F. Austin and J. B. Carmichael, Jr.

Greensboro, Ga.—South East Gulfport Tele-

phone Co. incorporated with \$3000 capital stock by S. C. Jones and others.

Huttonsville, W. Va.—Citizens' United Telephone Co., Wheeling, W. Va., John R. Walton, president, will apply for franchise to construct and maintain telephone system.

McClellanville, S. C.—McClellanville Telephone Co. incorporated by Henry T. Morrison, Richard M. Lofton and Henry M. Lofton, Jr.

Mill Creek, W. Va.—Citizens' United Telephone Co., Wheeling, W. Va., John R. Walton, president, will apply for franchise to construct and maintain telephone system.

Ripley, Okla.—Olive Grove Telephone Co. incorporated by J. B. Bennett, Harry Geer and W. F. Tietz.

Stillwater, Okla.—Payne County Rural Telephone Co. incorporated with \$15,000 capital stock by H. A. Jones, O. W. Trigg and S. H. Stanley.

Weatherford, Okla.—Farmers' Mutual Telephone Co. has increased capital stock to \$10,000.

TEXTILE MILLS

Arcadia, S. C.—Sheeting—Arcadia Mill awarded contract, as lately reported, to Gallivan Building Co., Greenville, S. C., for erection of additional building; latter will be 105x255 feet, of brick; will install 10,000 spindles and 250 looms; all contracts awarded; J. E. Sirmine, Greenville, S. C., engineer in charge.

Charlotte, N. C.—Cotton Batting—Jasper Miller Son's Company incorporated with capital stock of \$20,000 by Jasper Miller and associates; will manufacture cotton batting.

Edgefield, S. C.—Cotton Cloth—Beaver Dam Mills will be incorporated with capital stock of \$300,000 to acquire Edgefield Manufacturing Co.; now has 5000 spindles, 328 looms, etc.; will increase to 10,000 spindles; B. F. Zimmerman, Greenville, S. C., president and treasurer.

Hickory, N. C.—Sateens, etc.—Ivey Cotton Mill Co. will add 200 looms; has begun construction of two-story additional building, 75x168 feet; new equipment will double output; now has 7770 ring spindles, 290 broad looms, etc.

Kansas City, Mo.—Kalt Goods—Goonenow-Brookfield Knitting Co., recently reported incorporated, has organized with J. Frank Goodenow, president-secretary-treasurer; Arthur D. Brookfield, manager; Rudolph Mueller, superintendent; has installed machinery for knitting coats; electric power; main office, 211 Westport avenue.

Lexington, N. C.—Print Cloth, etc.—Dacotah Cotton Mills, Nokom Cotton Mills and Wennonah Cotton Mills, C. A. Hunt, Jr., president of each company, have contracted with Southern Power Co. (main office, Charlotte, N. C.) for electricity; awarded contracts for electrical motors, equipment, etc., for transmission of 2000 horse-power.

Memphis, Tenn.—Bag Cloth.—American Bag Co. will organize company to build mill for manufacturing bag cloth; will probably capitalize at \$250,000.

Monroe, La.—Cotton Batting.—W. B. Smith, Ruston, La., is reported as planning formation of company to build cotton-batting mill at cost of \$50,000.

Rockingham, N. C.—Shirting, etc.—William Entwistle and George E. Entwistle, both of Lee Dee Manufacturing Co., will organize Entwistle Manufacturing Co., to build mill of 40,000 spindles and 1000 looms; has not engaged engineer; will probably have capital stock of \$1,000,000; Wm. Entwistle, president; W. B. Cole, vice-president and general manager; Geo. P. Entwistle, secretary-treasurer.

Zircola, N. C.—Cotton Yarn.—Green River Manufacturing Co. is reported as to add 2280 spindles and other machinery; now has 7300 ring and 2500 twister spindles, etc., driven by electricity.

WATER-WORKS

Baltimore, Md.—Board of Awards awarded contract, at \$41,000, to Edgemore Iron Co. of Edgemore, Del., for pipe-line boilers; F. H. Wagner, consulting engineer.

Baltimore, Md.—Alfred M. Quick, water engineer, recommends installation of additional pump of 25,000,000 gallons capacity in Mt. Royal pumping station to improve water supply in western district; cost \$150,000.

Canyon City, Texas.—City voted bond issue of \$25,000 for water-works and sewer system; water-works probably to consist of 36,000-gallon tank elevated 80 feet from ground, and 100,000-gallon reservoir, to be supplied with water by present light plant; also 6300 feet six-inch main, with plugs; A. M. Mantz, engineer.

Emporia, Va.—City is considering installation of filter plant to have capacity of 500,000

gallons daily; C. L. Broadwell, superintendent water-works department.

Henryetta, Okla.—City has engaged Granberry Jackson, Mount Pleasant, Tenn., to prepare plans and supervise construction of water-works; probably gravity system and concrete surface reservoir, with steel stand-pipe, etc.; competitive bids to be asked after plans are ready—probably in September; \$50,000 bond issue voted.

Highland Park, P. O. Richmond, Va.—City invites bids until July 31 for drawing plans and specifications for water-works and electric-light systems; W. T. Quarles, chairman committee on light and water, 514 Fifth Ave. (Recently noted. See "Machinery Wanted.")

Jellico, Tenn.—City voted \$45,000 bond issue for construction of water-works; preliminary surveys have been made for gravity type system, water to be secured from mountain two miles distant, between which and city there is an estimated fall of 350 or 400 feet; nine miles of piping will be laid; S. B. Snyder, Mayor. (Recently mentioned.)

Knoxville, Tenn.—City Council voted to purchase Knoxville Water Co.'s plant for \$125,000; S. D. Newton, City Engineer.

Leesburg, Fla.—J. Y. Clark, manager Leesburg Ice Co., recently noted to have been awarded 30-year water franchise, reports all contracts let and construction begun.

Lexington, Tenn.—City contemplates installing water-works and electric-light plant and wants to correspond with consulting engineer representing machinery company; expenditure not to exceed \$15,000. Address H. E. Graper, Lexington. (Previously mentioned. See "Machinery Wanted.")

Mission Ridge, P. O. Chattanooga, Tenn.—Mission Ridge Taxing District Commissioners, Robt. P. Woodard, president, Miller Bldg., Chattanooga, arranged with Chattanooga City Water Co. for establishment of water-works system on Mission Ridge; water mains to be installed and standpipe erected; pumping station to be installed at Ridgegate. (Bond issue of \$25,000, etc., recently noted.)

Moultrie, Ga.—City awarded contract to General Pipe & Foundry Co., Atlanta, Ga., at \$11,232 for furnishing water mains; Sullivan & Long, Bessemer, Ala., at \$1784 for laying same; R. D. Cole Manufacturing Co., Newnan, Ga., at \$750 for steel standpipe; Columbia Iron Works, Chattanooga, Tenn., for hydrants, valves, etc.; Platt Iron Works Co., Dayton, Ohio, at \$1550 for pump. H. S. Jaudon, Box 582, Savannah, Ga., is engineer; W. D. Scott, Mayor. (Recently mentioned.)

Nashville, Tenn.—Board of Public Works will soon award contract for laying 25,000 feet of water main in annexed territory; this will make 22 miles of mains, laying of which has been contracted for during 1909, and will probably cover \$200,000 fund received from sale of water-main bonds last year; W. W. Southgate, City Engineer.

Okemah, Okla.—M. A. Earl, Muskogee, Okla., is preparing plans, it is reported, for water-works and electric-light plant; estimated cost \$50,000.

Perry, Ga.—City engaged Hazelhurst & Anderson, Atlanta, Ga., as engineers for water-works, for which \$15,000 bond issue was recently reported voted. Bids will be opened August 18; F. M. Houser, Mayor. (See "Machinery Wanted.")

Pulaski, Va.—Town Council awarded contract to Lowe & Shoecraft, Bristol, Va.—Tenn., for construction of storage dam and pipe line leading therefrom to town reservoir; dam to contain 7500 cubic yards of concrete and 20 tons of reinforcement; 15,000 feet of 12-inch cast-iron mains; estimated cost \$40,000; G. H. Derrick, engineer; A. B. Hunt, clerk. (Recently noted.)

Quannah, Texas.—City will vote August 11 on issuance of \$30,000 of bonds for extension of water mains. Address The Mayor.

Rayne, La.—City voted \$5000 bond issue for extension of water-works. Address The Mayor. (Recently mentioned.)

Ruston, Md.—Ruston Heights Water Co. incorporated with \$1000 capital stock by John M. Shea and Luke P. McGuire, both of Shea & McGuire, 506 North Gay St., and Joseph L. McGuire, 736 East 21st St., all of Baltimore, Md.

Seneca, S. C.—Reported that contract will soon be let for installation of water-works system. Address Dr. W. F. Austin for information.

Smithfield, N. C.—Johnston County Commissioners, Sam T. Honeycutt, clerk, invite bids until September 6 for system of water-works for courthouse and jail. (See "Machinery Wanted.")

Teague, Texas.—City contracted with Layne & Bowler, Houston, Texas, to supply 200,000 gallons of water daily, water to be secured from wells near pumping station.

Texas City, Texas.—The Texas City Co., A. B. Wolvin, president, Duluth, Minn., is asking bids on water-works system; for water-works and fire protection; previously noted to include tank of 100,000 gallons capacity and pumping station at terminal depot shops; also two additional artesian wells. (See "Warehouses.")

Tyler, Texas.—City voted \$11,000 bond issue to extend water-works into North Tyler; about two miles of six-inch mains to be laid; John H. Bonner, Mayor. (Recently mentioned.)

Vicksburg, Miss.—City will lay water main on Cherry street; bids to be opened September 6; C. R. Twiss, City Engineer; J. J. Hayes, Mayor. (See "Machinery Wanted.")

Wagoner, Okla.—City will vote in August on issuance of \$300,000 water-works, electric light and city hall bonds. Address The Mayor.

Wilburton, Okla.—City voted issuance of \$35,000 of bonds for purchase of water-works and \$15,000 for improvement of same. Address The Mayor.

Winnsboro, Texas.—City voted \$18,000 water-works bonds. Address The Mayor.

WOODWORKING PLANTS

Cotton Plant, Ark.—Staves and Hoops.—Standard Stave & Hoop Co., B. G. Ohmit, president, has ordered machinery for plant recently mentioned; will erect two wood buildings 32x144 and 32x60 feet in size; cost of buildings, \$2500; daily capacity, 50,000 staves and 45,000 hoops; J. W. Baker, manager.

Davidson, N. C.—Woodworking.—Messrs. Bratton will establish woodworking and machine shop.

Elizabethton, Tenn.—Bobbins, Spools, etc. Sherwood Bobbin & Manufacturing Co., Greensboro, N. C., has dismantled plant for shipment to Elizabethton, where it will resume manufacture of bobbins, spools, skewers, etc.; will operate as Tennessee Bobbin & Spool Co., with M. S. Sherwood as general manager. He was secretary-treasurer of Sherwood Company.

Ficklen, Ga.—Spokes and Handles.—Ficklen Spoke & Handle Co. incorporated with \$10,000 capital stock by L. M. Wells, W. E. Wells, M. W. Berry and others.

Hammond, La.—Boxes.—Farmers' Box Co. incorporated with S. J. Graham, president and general manager; E. W. Vinyard, vice-president; W. R. Whitney, secretary-treasurer; will establish plant for manufacturing fruit and vegetable boxes.

Lake City, Fla.—Barrels, etc.—D. W. Brown has awarded contract for remodeling old Seminole Lumber Co.'s plant into cooperage plant.

Mobley, Ark.—Staves.—Mount Olive Stave Co., Batesville, Ark., will not establish stave factory at Mobley recently reported.

Mount Olive, N. C.—Fruit and Truck Packages.—Mount Olive Manufacturing Co. organized with \$20,000 capital stock by J. R. Bell, H. C. Hatcher and J. H. Pierce to manufacture fruit and truck packages; contemplate operation by August 15.

Norfolk, Va.—Furniture.—Phillips Furniture Co. incorporated with \$50,000 capital stock; S. C. Phillips, president; M. P. Stone, vice-president; V. D. Phillips, secretary-treasurer.

Shreveport, La.—Boxes.—Felig Bros. Box Manufacturing Co., St. Louis, Mo., contemplates establishment of box factory.

Walterboro, S. C.—Furniture.—Cook-Green Furniture Co. incorporated with \$3000 capital stock; W. S. Cook, president; E. D. Green, secretary-treasurer.

BURNED

Baconton, Ga.—Jackson Supply Co.'s gin-nery.

Bonanza, Ark.—First State Bank's building, loss \$20,000; Bonanza Hardware Co.'s store building, loss \$35,000; J. B. Gray's building, loss \$8000; Wright Drug Co.'s building, loss \$16,000; U. G. Hamilton's building, loss \$5000.

Brownfield, Texas.—Kirby Lumber Co.'s sawmill, planer, drykilns and 12,000,000 feet lumber; loss \$300,000; main office, Houston, Texas.

Chattanooga, Tenn.—Keith Hotel, C. M. and T. R. Preston, proprietors, damaged; loss \$10,000.

Conway, Ark.—Mal D. Jones' residence; loss \$3000.

Dallas, Texas.—Morton J. Smith's livery stable, owned by Phillip Sanger estate; loss \$38,000.

Delhi, La.—J. L. Alfrey's heading mill; loss \$7000.

Guion, Ark.—J. W. Williamson's gin and grist mill.

Hagerstown, Md.—Joseph G. Ernst's barn at Dry Run; loss \$7000.

Keyser, W. Va.—Farmers' Exchange flouring mill; loss \$12,000.

Lawrenceburg, Tenn.—Gibbs & Belew Building, used as theater, postoffice, etc.; loss \$7500.

Livingston, Ala.—T. L. Smith's residence, barn and outbuildings; loss \$8000.

Mart, Texas.—Mart Home Light & Power Co.'s plant; loss \$5000; J. Earle, Waco, Texas, owner.

Maryville, Mo.—F. G. Shoemaker's ice and storage plant.

Masontown, W. Va.—Hotel Altman, loss \$125,000; Henry L. Hershfield's store, loss \$10,000; Charles Richey's furniture store, loss \$15,000; L. H. Miller's department store, loss \$5000; First National Bank's building; Tri-State Telephone Co.'s exchange; F. M. Golley's store; F. S. Hawkins' photograph gallery; R. J. Anderson's store; Charles Gordon's restaurant; total loss, \$300,000.

Montgomery, Ala.—Atlantic Coast Line Railroad's West End car department, comprising paint, carpenter and repair shops, erecting shed and doctor's office; loss \$15,000; E. B. Pleasants, chief engineer, Wilmington, N. C.

Mountain Park, Okla.—Farmers & Merchants' Cotton Gin Co.'s plant.

Owenton, Ky.—The Holbrook Block; D. H. Daniel's clothing store, loss \$25,000; N. Tomlin's store and market, loss \$2500.

Pollock, La.—Bank of Pollock's building; Wainwright & Tate's store building; Charles Kitterlins' stable.

Richmond, Va.—Southern Railway's Belle Isle bridge, between Richmond and Belle Isle, in James River; loss \$50,000; D. W. Lum, Washington, D. C., company's chief engineer.

Roanoke, Va.—Leonard Bros.' sawmill.

Roanoke, Va.—Huff Mill property occupied as storage warehouse by Norfolk & Western Railway; C. S. Churchill of Roanoke, chief engineer; loss \$8000.

Romney, W. Va.—Farmers' Exchange flouring mill; loss \$12,000.

Rowland, N. C.—Farmer & Roberts' planing mill; loss \$7000.

South Pittsburg, Tenn.—Municipal jail. Address The Mayor.

Springfield, La.—G. H. A. Thomas Company's sawmill; loss \$25,000.

Stilson, Ga.—J. D. Strickland's residence; loss \$5000.

Tallahassee, Tenn.—Tallahassee Tobacco Co.'s factory, warehouse and offices, owned by J. C. Kendrick, Jr., and Doak Aydelott; loss on building \$6000.

Union City, Tenn.—Nailling Drug Co.'s building, loss \$10,000; Sid Waddell's building, loss \$6000.

Washington, D. C.—National Purity Paper Bottle Co.'s plant in Synch Court, between 3d, 4½, K and L streets S. W.; loss \$11,000.

Waynesboro, Va.—J. W. Ellison, Son & Co.'s two warehouses.

DAMAGED BY STORM.

Brazoria, Texas.—Texas Land & Sugar Co.'s sugar mill and other buildings; loss \$275,000.

Galveston, Texas.—Galveston Fishing & Amusement Co.'s pier, loss \$16,500; Galveston Fishing Club's pier, loss \$6000; Tarpon Company's fishing pier, loss \$10,000; Murdoch & Co.'s bathhouse, loss \$20,000; bathhouse of Breakers C, Jack Pearce, president, loss \$40,000.

BUILDING NOTES

APARTMENT-HOUSES

Chattanooga, Tenn.—John C. and Chas. W. Twinam, Temple Court, will award subcontracts (no general contract) for erection of \$26,000 apartment building previously mentioned; three stories and basement; pressed brick with stone trimmings; 66x100 feet; steam heat; tile in bathroom and halls; electric and gas lighting; six five-room and six four-room apartments; plans by J. G. Barnwell, The Elizabeth, Chattanooga.

Chattanooga, Tenn.—Sidney B. Wright, Times Bldg., will award subcontracts (no general contract) for erection of three-story-and-basement brick apartment-house recently described; six apartments; hot-water or steam heat; plans by Adams & Alsop, James Bldg., Chattanooga.

Dallas, Texas.—Mrs. M. E. Fendrick will erect store and apartment-house; two stories; brick; cost \$8800; J. Dawson Matthews

is architect; Mrs. Nellie S. Smith, contractor.

St. Louis, Mo.—Joseph Weiser purchased site 20x156 feet on which to erect apartment-house.

St. Louis, Mo.—Conrad Bloomeyer will erect three-story apartment-house to cost \$22,000.

BANK AND OFFICE BUILDINGS

Brownwood, Texas.—Citizens' National Bank accepted plans for two-story bank building to replace burned structure; cost \$25,000. (Recently mentioned.)

Dacula, Ga.—Dacula Banking Co., A. M. Wilson, president, will erect bank and office building; 25x60 feet; 40 feet for bank; semi-fireproof. (See "Machinery Wanted.")

Flat Creek, Tenn.—Flat Creek Savings Bank, G. F. Shofner, president, awarded contract to F. P. Hix, Shelbyville, Tenn., for erection of \$2000 bank building recently mentioned; pressed brick; 20x40 feet; semi-fireproof; will install bank fixtures.

Hendersonville, N. C.—G. W. Reagan, Gastonia, N. C., will erect three-story office building costing \$15,000.

Hendersonville, N. C.—People's National Bank, John Carter, president, will erect bank building; marble front.

Lockhart, Texas.—Union Bank & Trust Co., San Antonio, Texas, leased Henderson Building at Lockhart and will remodel; James G. Burleson will be in charge.

Lynchburg, Va.—Berry & Stroud awarded contract to W. B. Sneed & Son of Lynchburg to erect store and office building; three stories and basement; brick; 38x132 feet; steam heat; hot and cold water on each floor; bathrooms; plans by Heard & Cardwell of Lynchburg.

Malone, Texas.—E. L. Routh opened bids July 26 for erection of two-story bank and office building.

Matthews, N. C.—B. D. Funderburk, vice-president Bank of Matthews, will erect bank building; brick; two stories; frontage 50 feet.

Memphis, Tenn.—Building committee of Exchange Building Co., John Sneed Williams, chairman, accepted exterior plans by N. W. Woods, Jr., Memphis, for Exchange Building recently mentioned; 18 stories; first three stories of granite and remainder of brick with terra-cotta trimmings; steel frame; eight elevators; entire investment, \$1,250,000.

Meridian, Miss.—W. M. Wagner and Dave King will erect office building at Twenty-second avenue and 6th street; seven stories; cost about \$100,000; plans by Bert Stewart, Meridian.

New Hope, Ala.—Bank of New Hope awarded contract to R. G. Ross, Decatur, Ala., to erect bank building.

Ocean Springs, Miss.—Proposals will be opened August 4 for construction of two-story bank and office building; certified check, \$300; plans and specifications may be had by applying to Ocean Springs State Bank or to Wm. Drago, architect, 715 Hennen Bldg., New Orleans, La.

Raleigh, N. C.—Wake County Savings Bank is having plans prepared by Barrett & Thompson of Raleigh for bank building; stone; glass front.

Richmond, Ky.—Big Hill Coal Co., Harry P. Jones, president, general office Union Trust Bldg., Cincinnati, Ohio, awarded contract to William Bowman, Richmond, for erection of \$7000 office building; size, 40x60 feet; mill construction; hot-air heat; electric lighting; plans by Chas. Moorman, Richmond.

Rock Hill, S. C.—People's National Bank & Trust Co. awarded contract to J. A. Jones, Charlotte, N. C., for erection of bank building; four stories; stone, pressed brick and terra-cotta; hardwood floors; steel frame; cost \$30,000; electric lighting; electric elevators; plans by Shand & La Faye, Columbia, S. C. (Recently mentioned.)

San Angelo, Texas.—San Angelo Bank & Trust Co. organized Trust Building Co. with \$150,000 capital stock to erect bank and office building; six stories; steel and reinforced concrete; cost \$100,000.

San Angelo, Texas.—San Angelo Bank & Trust Co. organized Trust Building Co. with \$150,000 capital stock to erect bank and office building; six stories; steel and reinforced concrete; cost \$100,000. Sanguiet & Staats, Fort Worth, Texas, will prepare plans and specifications.

Sanford, N. C.—Dr. I. H. Lutterloh and Rev. R. W. Bally will erect \$10,000 combination bank and office and store building; contract awarded to John W. Brown, Sanford. (See "Miscellaneous Structures" and "Machinery Wanted.")

Thomas, Okla.—Farmers' State Guaranty

Bank, J. S. Huston, president, contemplates erection of building in about one year. (See "Machinery Wanted.")

Tyroneza, Ark.—Bank of Tyroneza, W. A. Beasley, president, will erect brick bank building.

Washington, D. C.—W. H. Walker and O. H. P. Johnson have purchased site and will erect seven-story fireproof office building with white terra-cotta front; plans by Milburn, Heister & Co., Home Life Bldg., Washington, D. C.; contracts to be awarded as soon as plans are completed.

Washington, D. C.—Southern Railway Co. is having plans and specifications prepared by Milburn, Heister & Co., Home Life Bldg., Washington, D. C., for construction of proposed office building on D street N. E. between 1st and 2d streets; building will be 142x168 feet; seven stories; steel frame construction; reinforced concrete floors and roof; terra-cotta block partitions; exterior will have granite base and unglazed light terra-cotta front; pressed brick side walls to match terra-cotta color; interior wood trim of oak; ornamental-iron stairways; marble treads and risers; electric elevators; electric lift for handling mail; electric lighting fixtures; telephone system; low-pressure direct steam heat.

West Monroe, La.—West Monroe State Bank, S. L. N. Larche, president, will erect \$5000 two-story fireproof brick bank building; gas lighting. (Recently noted under "Monroe.")

CHURCHES

Berkley Station, Norfolk, Va.—Berkley Avenue Baptist Church awarded contract to John W. Jones of Berkley at \$7000 to enlarge and improve edifice; 10 Sunday-school rooms to be added and about 150 seats to auditorium; plans by Lee & Diehl, Norfolk. (Recently mentioned.)

Charlotte, N. C.—Chalmers Memorial Associate Reformed Presbyterian Church, Rev. R. E. Hough, pastor, will have plans prepared by Hunter & Gordon of Charlotte for edifice; brick and stone; seating capacity, 700; cost \$15,000; contract to be let about October 1; S. W. Dendridge, chairman building committee. (Recently mentioned.)

Chattanooga, Tenn.—Cumberland Presbyterian Church will erect edifice to cost \$50,000. Address The Pastor, Unionist Branch, Cumberland Presbyterian Congregation.

Durham, N. C.—White Rock Baptist Church has plans by Hill C. Linthicum, Durham, for remodeling edifice; cost of improvements \$15,000.

Durham, N. C.—St. Joseph A. M. Church has plans by Hill C. Linthicum, Durham, for improvements to structure; improvements to cost \$15,000.

Lovelady, Texas.—Church of which Rev. J. N. Malner is pastor will erect \$5000 edifice; plans by J. F. Brook, Palestine, Texas.

East Chattanooga, Tenn.—East Chattanooga Baptist Church, A. P. Moore, pastor, will erect \$8000 brick edifice previously noted; metal shingle roof; concrete foundations; hard pine interior finish; plans by R. H. Hunt, James Bldg., Chattanooga; contractor, Joseph T. Horner, 701 Glass St., East Chattanooga.

Fulton, Ky.—First Christian Congregation will remodel and enlarge edifice at cost of \$3000. Address The Pastor, First Christian Church.

Gainesville, Ga.—M. D. Hudson of Gainesville has contract to erect brick church building at Nails Creek, in Banks county; will require 250,000 brick, which will be manufactured on site.

Mangum, Okla.—Baptist congregation reported to erect \$25,000 edifice. Address The Pastor, Baptist Church.

McMechen, W. Va.—First M. E. Church will erect edifice. Address The Pastor First M. E. Congregation.

Meridian, Miss.—Fifteenth Avenue Baptist Church, Rev. I. A. Halley, pastor, will remodel edifice, expending \$6000.

Oklahoma City, Okla.—St. Paul's Episcopal Church secured permit for proposed enlargement of edifice at cost of \$10,000; L. C. Stone of Oklahoma City, contractor.

Oklmulgee, Okla.—Bids will be opened August 2 for erection of brick and stone building for First Methodist Church; plans and specifications furnished by Griffith and Keith of Sapulpa and may be seen at office of architects or of O. K. Plumbing Co., Okmulgee; bids are to include everything to complete building except plumbing, heating, finish hardware, and all glass, except what is necessary to cover dome; certified check, \$500; O. A. Lambert, chairman of committee.

Pflugerville, Texas.—S. F. Evens and L. M. Lee, Taylor, Texas, have contract for erec-

tion of edifice for German Lutheran congregation; brick veneer structure; cost \$9000; Henry Struve, Taylor, Texas, is architect. (Recently mentioned.)

Princeton, Ark.—Methodist Church awarded contract to George W. Hearn of Princeton to erect edifice, replacing structure destroyed by storm.

Princeton, Ark.—Presbyterian Congregation awarded contract to George W. Hearn of Princeton to rebuild edifice destroyed by storm.

Shawnee, Okla.—Emanuel Episcopal Church awarded contract to Higgins & Furness of Shawnee to erect edifice costing \$10,000.

Statesville, N. C.—Broad Street Methodist Church will soon begin work of finishing main auditorium of new edifice; completed cost, including site, \$40,000. Address The Pastor, Broad Street Methodist Congregation.

St. Louis, Mo.—Rev. O. J. McDonald will erect one-story church building to cost \$48,000.

Washington, D. C.—Southern Methodist Church is considering erection of cathedral. Address Rev. J. Howard Wells, pastor Mount Vernon Methodist Church, Mount Vernon Pl. and 9th St. N. W.

Wharton, Texas.—Baptist Congregation awarded contract for erection of \$9000 edifice to Jopling Bros., Trinity, Texas (present address, Wharton); building, 43x80 feet; ordinary construction; electric lighting; plans by L. S. Green, Commercial National Bank Bldg., Houston, Texas. (See "Machinery Wanted.")

Wheeling, W. Va.—Glendale M. E. Church has advertised for bids for erection of edifice; brick veneer; seating capacity 350. Address The Pastor, Glendale M. E. Congregation.

Winona, Miss.—Bids for construction of brick church will be opened at office of J. C. Purnell, supervising architect, Jackson, Miss., August 2; certified check, \$500. For further particulars address supervising architect.

COURTHOUSES

Aiken, S. C.—Bids will be opened August 6 for heating plant and repairs to courthouse; Jesse Green, chief commissioner. (See "Machinery Wanted.")

Boerne, Texas.—Kendall county, H. Thels, county judge, had plans prepared by Alfred Giles, San Antonio, for \$7000 stone addition to courthouse; bids to be opened in August. (Recently mentioned.)

Scottsboro, Ala.—J. J. Williams, Judge of Probate, Jackson county, will receive bids until August 10 for improvement of courthouse; plans and specifications on file in office of Mr. Williams and of R. H. Hunt, architect, Chattanooga, Tenn.; cost \$25,000.

Sumterville, Fla.—Sumter County Commissioners contemplate erecting courthouse, and invite architects to prepare plans and specifications and submit same at regular meeting on August 2; building to be of pressed brick, with vault in clerk's office and another in county judge's office; cost \$20,000 to \$30,000; George Nelson, clerk and auditor.

Tifton, Ga.—Tift county is considering erection of courthouse; M. Tucker, Jr., John Goff and I. W. Bowen, Board County Commissioners.

DWELLINGS

Atlanta, Ga.—W. J. Davis will erect number of dwellings. (See "Miscellaneous Enterprises.")

Baltimore, Md.—Saratoga Improvement Co. awarded contract to Rodgers & McCall, 21 E. Saratoga St., Baltimore, for erection of two dwellings on Norfolk avenue; stone foundation; slate roof; 25x28 feet; steam heat; combination fixtures; frame; cost \$6500 each; plans by Clarence E. Anderson, Law Bldg., Baltimore.

Baltimore, Md.—Rowland Watts, 2846 N. Calvert St., awarded contract to G. Stohr, 1334 N. Stricker St., for erection of dwelling at Powhatan and Weedhelm avenues; two and a half stories; frame; 28x30 feet; slate roof; steam heat; interior finished in hardwood; gas and electric lights; cost \$5000; plans by George R. Morris, Equitable Bldg., Baltimore.

Baltimore, Md.—J. S. Downing, 602 41st St., will erect three dwellings on Franklin terrace; two stories; brick; hot-water heat; electric lights; Carey roofing; bluestone foundations; cost \$8000; two dwellings, 15x50 feet; one with store, 18x50 feet; plans and construction by owner.

Baltimore, Md.—John A. Lamon, 1808 West North Ave., and Joseph Lamon, 1732 North Carey St., will erect two dwellings at Severna Park; two and a half stories; frame.

Baltimore, Md.—Mrs. Bertha Meyer, 408-414

West Pratt St., will erect bungalow at Severna Park, to cost \$3500.

Baltimore, Md.—Charles J. Voneiff, 504 Pennsylvania Ave., has purchased site 68x295 feet and will erect residence at Severna Park.

Baltimore, Md.—J. Thomas Morris, secretary-treasurer Maryland Realty Co., 6 East Lexington St., purchased site 155x193 feet at Clement and River Sts. and will erect number of brick dwellings.

Baltimore, Md.—Joseph L. White Realty Co., 115 South Broadway, is having plans prepared by Charles Broring, 800 North Wolfe St., Baltimore, for 19 dwellings on Lakewood avenue; two stories; brick; 15x65 feet; ornamental galvanized-iron cornices; cost \$28,000.

Baltimore, Md.—Edgar Goodman of the American, Baltimore and South Sts., is having plans prepared by Louis Levi, American Bldg., Baltimore, for residence at Mont Alto; two and a half stories; ornamental frame construction; concrete foundation; contractors estimating include Harry W. Johnson, 2814 Rayner Ave.; E. G. Turner, 2010 Harlem Ave., both of Baltimore, and Daniel Harding, Towson, Md.

Baltimore, Md.—New Era Realty & Construction Co., 11 East Lexington St., will erect 18 dwellings on Highland avenue, Walbrook; three stories; site 367x150 feet.

Baltimore, Md.—Leonard R. Walker, 208 North Stricker St., awarded contract to Ellen Building Co., Baltimore, for erection of dwelling; two and a half stories; frame; 28x32 feet; stone foundation; slate roof; steam heat; combination fixtures; cost \$5000.

Birmingham, Ala.—Charles de Bardeleben is having plans prepared by Miller & Martin, Birmingham, for residence in Idlewild Park.

Birmingham, Ala.—E. M. Prince is having plans prepared by Miller & Martin, Birmingham, for residence in Idlewild Park.

Calvert, Texas.—Mrs. Frank Barton will erect \$10,000 residence.

Charlotte, N. C.—Mrs. C. W. Johnson had plans prepared by Hook & Rogers, Charlotte, for two-story residence; brick veneer and stucco; ordinary construction; electric lighting; hardwood floors; low-pressure steam heat.

Chattanooga, Tenn.—John Dowling, 139 East Terrace St., awarded contract to Jas. R. Ryan, 317 East 8th St., Chattanooga, to erect brick dwelling at 134 East Terrace street; two stories and basement; seven rooms; brick; cypress or metal-shingle roof; hard pine interior finish; cabinet mantels; hot-air or hot-water heat; electric and gas lighting; cost \$3000.

Cumberland, Md.—Dr. C. L. Owens, 100 Virginia Ave., will erect dwelling; two stories; pressed brick; stone trimmings; steam heat; 12 rooms; office; ordinary construction; hot-water heat; electric and natural-gas lighting; cost \$5200.

Fields, La.—Lutcher Moore Lumber Co., main office, Orange, Texas, will erect 80 dwellings.

Florence, Ala.—Mrs. Wm. L. Hurst awarded contract to W. F. Harget, Florence, for erection of dwelling; two stories; nine rooms; 120x200 feet; cost several thousand dollars.

Galveston, Texas.—E. D. Chadick has awarded contract to Dupree & Gracey, Galveston, for erection of dwelling; two and one-half stories; electric heat and lights; cost \$6000.

Houston, Texas.—Thompson Bros. Lumber Co. planning to erect 250 dwellings. (See "Lumber Manufacturing Plants.")

Kansas City, Mo.—Charles Balrd will erect residence.

Knoxville, Tenn.—Mrs. Lizzie Lillard will erect residence; estimated cost \$4750.

Knoxville, Tenn.—L. G. Waters will erect three dwellings; cost \$2500 each.

Lacey Spring, Va.—Jacob Cole will erect residence.

Little Rock, Ark.—B. C. Bain will erect residence to cost \$10,000.

Little Rock, Ark.—Mr. Bartholemew is having plans prepared by J. M. Whitehead, Little Rock, for \$8000 residence.

Little Rock, Ark.—Ed Reichardt is having plans prepared by J. M. Whitehead, Little Rock, for \$3000 residence.

Little Rock, Ark.—Durand Whipple has plans by George R. Mann, Little Rock, for residence; two stories; brick; cost \$10,000.

Little Rock, Ark.—John M. Moore has plans by George R. Mann, Little Rock, for dwellings; two stories; brick; cost \$10,000.

Memphis, Tenn.—W. L. Smith will erect

residence; two stories; brick veneer; tile roof; 10 rooms; cost \$15,000; owner builder.

Memphis, Tenn.—R. T. Ronaldson awarded contract to R. D. Holladay, Memphis, for erection of residence; two stories; frame; seven rooms; cost, exclusive of heating, wiring and plumbing, \$4000.

Memphis, Tenn.—R. T. Cooper awarded contract to J. W. Williamson, Memphis, for erection of residence; two stories; brick veneer; 10 rooms; slate roof; concrete foundations; cost, exclusive of heating, wiring and plumbing, \$12,000.

Mount Pleasant, P. O. Washington, D. C.—A. W. Mechen, Baltimore, Md., has awarded contract to John H. Nolan, 1413 G street N. W., Washington, D. C., for erection of four dwellings at 14th and Webster streets, Mount Pleasant; two stories and attic; brick foundation; slate roof.

Mt. Washington, Md.—Mt. Washington Development Co., Forest Park, Baltimore, Md., is preparing to erect two dwellings.

Nashville, Tenn.—A. S. Warren, Jr., will expend \$8000 in erection of residence (recently noted) after plans by Thomas S. Marr, Nashville; size, 48x42 feet; 10 rooms; two baths; brick walls; hot-air heat; electric and gas lighting.

Nashville, Tenn.—John T. Landis has plans by Thompson, Asmus & Norton, Nashville, for erection of dwelling; two stories; 16 rooms; gas and electric lights; will install telephone system; cost \$25,000.

Norfolk, Va.—Bertha Cecil Myers awarded contract to Callis & Thomas, Norfolk, for erection of \$3479 frame dwelling recently mentioned; ordinary construction; electric and gas lighting; plans by W. T. Zepp, 18th and Granby Sts., Norfolk.

Norfolk, Va.—I. S. D. Sauls' residence, recently mentioned, will be of brick construction; steam heat; gas and electric lighting; plans by R. Edward Mitchell, Norfolk; Mr. Sauls' address, 402 Main St.

Oneonta, Ala.—John Sharp Williams, Washington, D. C., will not erect residence at Oneonta. (Recently incorrectly reported.)

Palestine, Texas.—Geo. W. Burkett awarded contract to Jno. H. Ganht, Palestine, for erection of \$9000 residence.

Raleigh, N. C.—Mrs. C. H. Dargan will erect dwelling; cost \$3000.

Raleigh, N. C.—R. D. W. Connor will erect dwelling; cost \$3000.

Roland Park, Station L, Baltimore, Md.—Harold Randolph, 28 East Preston St., Baltimore, is having plans prepared by Wyatt & Nolting, Keyser Bldg., Baltimore, for residence at Roland Park; two and one half stories; half concrete and half ornamental timber; Old English style; cost \$18,000; contractors estimating include John Cowan, 106 West Madison St.; A. F. West, 217 South Gilmor St.; Gustav Stohr, 1334 North Stricker St.; Gladfelter & Chambers, 2072 Woodberry Ave.; Willard E. Harn, 2700 Huntingdon Ave., all of Baltimore, and Roland Park Co., Roland Park.

Savannah, Ga.—A. J. Ritch has plans by Wallin & Young, Savannah, for residence; two stories; frame; 48x55 feet; colonial style; rock-faced limestone foundation with weatherboarding above; slate roof; cost \$15,000.

Savannah, Ga.—Mrs. L. Purse awarded contract to A. S. Bacon & Sons, Savannah, for erection of residence recently mentioned; two stories; frame; colonial style; tiled bathroom; hot-air heat; cost \$6000; plans by Percy Sugden, Savannah.

Smithsburg, Md.—C. V. Harpe has plans by Woltz & Porter, Hagerstown, Md., for residence.

Sparrows Point, Md.—Maryland Steel Co. will erect two double brick dwellings on C street; cost \$10,000.

Spartanburg, S. C.—H. A. Ligon awarded contract to W. L. Bryson, Spartanburg, for erection of 43 two, three, four and seven room cottages for operatives; cost \$16,000.

St. Louis, Mo.—R. E. Chappelow has plans by Stephen & Parsons, St. Louis, for residence in Parkview; two and a half stories; cost \$7500.

Wadesboro, N. C.—L. D. Robinson contemplates erection of 8 or 10-room dwelling; plans by J. M. McMichael, Charlotte, N. C.; structure to have slate roof; steam heat; electric lighting; contractors now estimating.

Washington, D. C.—H. R. Howenstein, 1314 F St. N. W., had plans prepared by L. T. Williams for five two-story brick dwellings recently noted; ordinary construction; hot-air heat; gas lighting; cost, \$12,500; construction by owner.

GOVERNMENT AND STATE BUILDINGS

Charleston, S. C.—Barracks and Officers' Quarters.—Headquarters U. S. Marine Corps, Quartermaster's Office, Washington, D. C. Proposals will be received until August 19 for construction of marine barracks and marine officers' quarters at Navy-yard, Charleston. Proposal blanks, plans, specifications and other information may be obtained from commanding officer, marine barracks, Navy-yard, Charleston, or F. L. Denny, Colonel, Quartermaster, Washington, D. C.

Corsicana, Texas.—Orphanage.—Bids will be received in office of E. W. Tarrant, superintendent State Orphan Home at Corsicana until August 2 for purchasing and placing in position two tubular boilers, each 100 horse-power; water softener; painting and stripping walls of five brick dormitories; filling in basements of three buildings with earth; renewing floors and ceilings of three buildings; replacing lavatories, sinks and baths in several buildings; renewing and repairing heating plant; purchasing brick and laying walks; remodeling and adding to hospital; excavating and walling with brick tunnel 800 feet in length; certified check, 10 per cent. of bid; specifications and plans on file in office of superintendent. (See "Machinery Wanted.")

Fort Screven, Ga.—Buildings.—E. Morgan, Newport News, Va., has contract to erect buildings at Fort Screven at total of \$64,000; structures include bachelors' quarters, barracks, mess hall, etc. (Previously mentioned.)

Gainesville, Fla.—Experiment Station, etc. Bids will be received until August 6 at office of F. P. Fleming, Jacksonville, Fla., for construction of agricultural experiment station and science hall at Gainesville, Fla.; each bid for construction of buildings to be accompanied by certified check for \$5000, and each heating bid with certified check for \$500. Drawings and specifications may be seen at office of Edwards & Walter, architects, 631 Candler Bldg., Atlanta, Ga. Contractors may obtain drawings and specifications from architects by depositing certified check for \$25; subcontractors to pay architects \$10 for use of drawings; P. K. Yonge, chairman Board of Control, State of Florida.

Laredo, Texas.—Postoffice, etc.—Treasury Department, office of supervising architect, James Knox Taylor, Washington, D. C. Proposals will be received until August 26 for additional approach work at United States postoffice and custom-house at Laredo in accordance with drawing and specification, copies of which may be had at above office or of custodian at Laredo at discretion of architect.

New Orleans, La.—Postoffice and Court-house.—Bids will be received at office of James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C., until August 31 for construction, excepting mechanical equipment and interior finish, of U. S. Postoffice and Court-house at New Orleans, in accordance with plans and specifications, copies of which may be had at above office, or of Architects Hale & Rogers, 11 E. 24th St., New York, at discretion of Supervising Architect; applications to be accompanied by certified check for \$250.

Paris, Ky.—Postoffice.—Treasury Department, Office of Supervising Architect, James Knox Taylor, Washington, D. C. Sealed proposals will be received at this office until August 30 for construction (including plumbing, gaspiping, heating apparatus, electric conduits and wiring) of United States postoffice at Paris, in accordance with drawings and specifications, copies of which may be had from custodian of site at Paris, or at this office, at discretion of architect.

Washington, D. C.—Hospital.—Frank Pierce, acting Secretary, Department of Interior, Washington, D. C., will receive bids until August 17 for remodeling boiler plant at Government Hospital for Insane at Washington in accordance with plans and specifications, copies of which, with proposal form, may be had on application at Department.

Washington, D. C.—Sealed proposals, endorsed "Proposals for Improvements to Building No. 41," will be received at Bureau of Yards and Docks, Navy Department, Washington, D. C., until August 21 for improvements to building No. 41 at navy-yard. Plans and specifications can be obtained on application to bureau or to commandant of yard named. R. C. Hollyday, chief of bureau. Date extended from July 31.

HOTELS

Baltimore, Md.—Parker, Thomas & Rice, Union Trust Bldg., Baltimore, are completing plans and specifications for proposed ad-

dition to Hotel Belvedere, contract for erecting which has been awarded Edward Brady & Son, 1109-1113 Cathedral St., Baltimore; structure will be fireproof; two stories; 25x185 feet; front of pressed brick with marble trimmings; cost \$30,000.

Beaufort, N. C.—Charles L. Abernathy will erect hotel.

Birmingham, Ala.—Louis V. Clark is interested in erection of proposed hotel at Fourth avenue and 20th street.

Bluefield, W. Va.—Samuel Metz will erect seven-story hotel; contract for heating and plumbing awarded at \$15,000 to Robert W. Kyle & Co., Wheeling, W. Va.

Dallas, Texas.—Otto Herold, manager, will expend \$50,000 in remodeling Oriental Hotel; new tile floors, electric wires to be placed in conduits, marble columns in center of main dining-room, etc.

El Dorado, Ark.—El Dorado Hotel Co. incorporated with \$50,000 capital stock by R. N. Garrett, H. C. McKinney, R. H. Terrell and others; has had plans prepared by Gibb & Sanders, Little Rock, Ark., and will soon award contract for erection of hotel; three stories; with basement; 60 rooms; 100x100 feet; steam heat; electric lighting; cost \$35,000. (Recently mentioned.)

Excelsior Springs, Mo.—Elm Tree Inn Co. incorporated with \$45,000 capital stock by Willis Wood, Charles Loomis and Eva Ward.

Hot Springs, Ark.—Joseph S. Horner (office over Sorrells' drug store) invites bids for erection of addition to Louisiana Hotel, 209 Park Ave.; plans and specifications on file at his office.

Mangum, Okla.—Mathewson & Hamilton reported to erect three-story hotel.

Pascagoula, Miss.—W. W. Newcomb of Grunewald Hotel and Guy Stone of Stone Bros., Hennen Bldg., both of New Orleans, La., are interested in erection of hotel at Pascagoula Beach costing \$40,000.

Temple, Texas.—W. H. Stegall awarded contract to E. Nelson, Waco, Texas, at \$25,050 for erection of four-story brick annex to Stegall Hotel. (Recently mentioned.)

MISCELLANEOUS STRUCTURES

Anacostia, D. C.—Home.—Episcopal Home for Children, Washington, D. C., is having plans prepared by York & Sawyer, 156 Fifth Ave., New York, for proposed assembly hall and administration building.

Atlanta, Ga.—Alms-house.—Fulton county has plans by Morgan & Dillon, Atlanta, for proposed almshouse. It is planned to erect three-story structure to cost \$75,000.

Baltimore, Md.—Leader Department Store, Howard and Lexington Sts., Cahn, Coblenz & Co., proprietors, awarded contract to R. B. Mason, 324 West Biddle St., Baltimore, for erection of additional story; slag roof; cost \$10,000; plans by A. Lowther Ferrest, 411 St. Paul St., Baltimore.

Baltimore, Md.—Garage.—J. H. Dashiell, 2902 St. Paul St., awarded contract to A. J. Cortes, Baltimore, for erection of garage in rear of dwelling; one story; concrete foundation; red pressed brick; slag roof.

Birmingham, Ala.—Lodge.—Magie City Camp No. 4, Woodmen of World, will erect four-story lodge building; cost \$20,000.

Charlotte, N. C.—Belk Bros. awarded contract to J. A. Jones, Charlotte, for erection of store addition mentioned in June; six stories; 41x178 feet; 75,000 square feet floor space; brick and steel; ordinary construction; steam heat; electric lights; freight and passenger elevators; cost \$40,000; plans by Wheeler, Galligher & Stern, Charlotte.

Columbia, La.—Masonic Hall.—Masonic Order, R. R. Redditt, secretary, will expend \$6000 in erection of building recently mentioned; two-story structure; 34x100 feet; brick; concrete trimmings; galvanized-iron roof; plate-glass front; store on first floor; hall above; plans by Smith & Barthel, Monroe, La.

Covington, Va.—Business.—C. A. Keck awarded contract to John Alexander, Covington, for erection of business building; two stories; red brick; cost \$5000.

Dallas, Texas.—Business.—Mrs. Ann Prather will erect business block.

Dallas, Texas.—Store.—Frank O. Witchell will erect brick store building.

Dallas, Texas.—Store.—L. O. Daniel Millinery Co. will erect building; four stories and basement; steel, stone and brick; passenger and freight elevators; automatic fire sprinkler system; steam heat; private branch telephone exchange; cost \$40,000.

Decatur, Ala.—Business.—W. W. Garnett awarded contract to R. G. Ross, Decatur, for erection of business block; two stories; brick; frontage 80 feet.

De Leon, Texas.—Business.—C. R. Ayres

will erect brick business building; 75x100 feet.

Ducktown, Tenn.—Y. M. C. A.—Young Men's Christian Association, U. T. Grizzard, assistant State secretary, Nashville, Tenn., is planning erection of association building.

Elizabeth City, N. C.—Store, etc.—Kramer Bros. & Co. awarded contract to J. W. Martin, Elizabeth City, for erection of proposed store and office building; plans by Lee & Diehl, Norfolk, Va.; brick and stone structure; 88x128 feet; metal roof; hot-water heat; electric lighting; freight hand-power elevator; cost \$30,000.

Eldorado, Ark.—Business.—R. S. Daugherty will erect business building; one story; pressed brick.

Eldorado, Ark.—Store.—Mrs. Anna G. Wilson will erect store building; two stories; cost \$8000.

Fort Worth, Texas.—Pens.—The Fort Worth Stockyards Co. will erect 28 additional pens to accommodate 2500 hogs, or 28 carloads, giving total capacity of 8000 daily.

Fountain Inn, S. C.—Store.—J. W. Adams and L. P. Armstrong awarded contract for proposed store building to W. M. Jordan, Greenville, S. C.; two-story structure; 51x90 feet; press-brick front; gravel roof; metal ceilings; freight elevator.

Fountain Inn, S. C.—Store.—R. B. Holland awarded contract to W. M. Jordan, Greenville, S. C., for erection of proposed one-story store building; 66x50 feet; press-brick front; metal ceilings; gravel roof.

Galveston, Texas.—Bathhouse.—Breakers Company, Jack Pearce, president, will erect bathhouse to replace damaged structure; 1000 rooms; cost \$50,000.

Galveston, Texas.—Bathhouse.—J. J. Davis is arranging for rebuilding on larger scale Murdock's bathhouse, damaged by storm.

Houston, Texas.—Business.—Christian Hahn, El Campo, Texas, awarded contract to W. Tharp, Sr., Houston, Texas, for erection of business building; two stories.

Jackson, Ga.—Business.—Homer & Bluma Carmichael will erect business building; brick; plate-glass front.

Jackson, Ga.—Business.—R. W. Mays will erect business building; two stories; brick.

Jackson, Ga.—Business.—Ham & Carter Company will erect business building.

Knoxville, Tenn.—Art and Lyceum Building.—Lyceum and Art Museum planning erection of annex to art and lyceum building; plans by Geo. F. Barber, Knoxville.

Knoxville, Tenn.—Business.—Knoxville Leasing Co., C. B. Atkin, president, has leased site 140x140 feet and will erect two-story business block, with foundation to support additional stories; cost \$100,000.

Little Rock, Ark.—Home.—Methodist Congregation has plans by J. M. Whitehead, Little Rock, for proposed orphanage.

Louisville, Ky.—Business.—Arcade Realty Co. incorporated with \$100,000 capital stock by Sam P. Jones, R. H. Edelen, James Gamble and M. W. Burd, secretary; plans to erect four-story business building.

Lufkin, Texas.—Sanitarium.—Angelina County Medical Association is planning erection of sanitarium; two stories and basement; brick; cost \$20,000.

Macon, Ga.—Stockade, etc.—Bibb county awarded contract at \$9407 to Wilder & Paulin, Macon, for erection of stockade and convict headquarters recently mentioned; one story; brick; 45x170 feet; plans by C. R. Ellis, Macon.

Malone, Texas.—Business.—E. L. Routh will erect business building; two stories; brick.

Meridian, Miss.—Business.—W. B. Caraway will erect business building; three stories; pressed brick.

New Hope, Ala.—Business.—J. E. Butler Company awarded contract to R. G. Ross, Decatur, Ala., for erection of business building; two stories; brick.

Ocala, Fla.—Masonic Hall, etc.—Marion-Dunn Lodge No. 19, F. and A. M., W. V. Wheeler, secretary, will erect masonic hall and opera-house recently mentioned; two stories; lower story 65x115 feet; ordinary construction; electric lighting; cost \$17,000; plans by Geo. Mackay, Ocala; bids to be opened August 20.

Pensacola, Fla.—Fair Buildings.—Tri-County Fair Association will expend \$10,000 for enclosing and improving site and erection of buildings for fair at Magnolia Bluff.

Portsmouth, Va.—Lodge.—Independent Order of Odd Fellows will expend \$12,000 for remodeling Odd Fellows' Hall, including erection of additional story.

Quannah, Texas.—Sanatorium.—Dr. Ball and associates reported to erect 20-room sanatorium costing \$10,000.

Raleigh, N. C.—Business.—Henry T. Hicks

will erect business building; three stories; brick; cost \$9000.

Sanford, N. C.—Store, etc.—C. H. Smith will erect building recently mentioned; first floor for shoe store; barber shop in basement; second-floor for offices; Masonic hall on third floor; front of Washington pressed brick; hot-water heat; architect, J. M. Kennedy, Raleigh, N. C., in charge of construction.

Sanford, N. C.—Drug Store, etc.—Dr. I. H. Lutterloh and Rev. R. W. Baily awarded contract to John W. Brown, Sanford, for erection of \$10,000 building; semi-fireproof; 48x100 feet; three stories; to contain drug store, bank, barber shop, offices, etc.; electric lighting; plans by J. M. Kennedy, Raleigh, N. C. (See "Machinery Wanted.")

Williamston, S. C.—Business.—T. M. Mahon will erect business building.

Victoria, Texas.—Business.—M. Weber will erect business building.

Victoria, Texas.—Business.—B. H. Matthews will erect business building.

Victoria, Texas.—Business.—C. R. Alden will erect business building.

Washington, D. C.—Home.—Episcopal Home for Children will erect \$35,000 addition.

MUNICIPAL BUILDINGS

Baltimore, Md.—Hospital, etc.—Edward A. Preston, building inspector, distributed plans prepared by Parker, Thomas & Rice, Union Trust Bldg., Baltimore, for buildings to be erected at Bayview Asylum; structures include hospital with accommodations for 100 patients, dining hall and power-house; bids are to be submitted on August 2 to Board of Awards; following contractors are estimating: Charles L. Stockhausen, 4 Marine Bank Bldg.; American Contracting Co., American Bldg., both of Baltimore; Daniel Harding, Towson, Md. (Previously mentioned.)

Baltimore, Md.—Ward Buildings.—J. Barry Mahool, president Board of Awards, City Hall, will open bids August 4 for erection of ward building "A" at Bayview Hospital; bids must be left with J. Sewell Thomas, City Register, at his office, City Hall; bids must be accompanied by certified check of bidder on some clearing-house bank for \$500, payable to Mayor and City Council of Baltimore; successful bidder required to give bond and comply with City Charter respecting contracts; drawings and specifications on file at office of Edward D. Preston, Inspector of Buildings, City Hall.

Baltimore, Md.—Library.—Joseph Evans Sperry, Calvert Bldg., Baltimore, has completed plans for Enoch Pratt Free Library (Branch No. 13), to be erected on site bounded by Kenwood avenue, Fayette street, Philadelphia road and Patuxent street; structure will be one story; 84x36 feet; brick and marble; lecture hall in basement with seating capacity of 200; cost \$22,000; following contractors estimating: Henry Smith & Sons Company, 116-120 South Regester St.; John Waters, 23 East Center St.; Morrow Bros., 218 West Saratoga St.; B. F. Bennett, 123 South Howard St.; Edward Brady & Son, 1109-1113 Cathedral St.; J. Henry Miller, 106 Dover St.; John Cowan, 106 West Madison St. (Recently mentioned.)

Bryan, Texas.—Fire Station.—City awarded contract to C. E. Jenkins, Galveston, Texas, to erect two-story fire station.

Charleston, S. C.—Engine-house.—Board of Fire Masters, L. Behrens, clerk, will open bids August 10 for erection and completion of two-story brick engine-house; plans and specifications by Henry F. Walker, architect, Charleston; certified check, \$100; plans and specifications can be seen at office chief of Fire Department, 116 Meeting St., or at architect.

Hillsboro, Texas.—City Hall and Fire Station.—C. D. Hill & Co., Dallas, Texas, are names of architects who prepared plans for city hall and fire station recently mentioned; bids will be received until August 10 by Edward Woodall, Mayor, or architects; plans on file in office of Mayor or architect; certified check, \$500.

Macon, Ga.—Hospital.—Holly Bros. of Macon have contract to remodel municipal hospital.

Monroe, La.—City Hall.—Southern Building Co., Louisville, Ky., has contract at \$59,750 for erection of city hall and prison combined and engine-house at Monroe; A. A. Forsythe, Mayor. (Recently mentioned.)

Wagoner, Okla.—City Hall.—City will vote in August on issuance of \$200,000 bonds for a city hall, water-works and electric-light plant. Address The Mayor.

RAILWAY STATIONS

Bartlesville, Okla.—Atchison, Topeka & Santa Fe Railway Co., C. A. Morse, chief

engineer, Topeka, Kans., will expend about \$25,000 on proposed passenger station, together with yard changes and paving; construction commenced.

Houston, Texas.—Westmoreland Railroad Co. (Incorporated by W. G. Sears of Houston and others) will erect union depot.

Lake City, Fla.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., will erect brick freight depot.

Mt. Sterling, Ky.—Chesapeake & Ohio Railway, F. I. Cabell, engineer maintenance of way, Richmond, Va., awarded contract to A. M. Walkup, American National Bank Bldg., Richmond, for erection of passenger depot previously mentioned; main building 36x72 feet, with three waiting-rooms, office, three toilets and cellar; express and baggage rooms 32x30 feet; 360-foot umbrella shed; brick and stone; ordinary construction; steam heat; electric lighting; scales; estimated cost \$18,000.

Quannah, Texas.—Quannah, Acme & Pacific Railway, F. M. Sanda, Acme, Texas, superintendent, will soon begin erection of two depots at Quannah. (See "Railway Shops, Terminals, Roundhouses, etc.")

Richmond, Va.—Chesapeake & Ohio Railway, F. I. Cabell, engineer maintenance of way, Richmond, has prepared plans and will soon award contract for remodeling of freight yards and erection of brick and concrete freight station and warehouse to cost about \$50,000; freight depository to be two stories on Broad street and contain offices in front; from Broad to Marshall street building will be 265 feet long, and from Marshall to Clay street of equal length, but one story high; this part will be used as warehouse.

Shepherdstown, W. Va.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., awarded contract to John P. Pettyjohn & Co., Lynchburg, Va., to erect passenger station; pressed brick; concrete foundation; steam heat; electric lighting; cost \$16,000. (Recently mentioned.)

SCHOOLS

Archer City, Texas.—Trustees Archer County School District No. 1 awarded contract to T. P. Hickman, Wichita Falls, Texas, for erection of proposed \$20,000 school.

Bloomington, Texas.—City will select architect August 2 to prepare plans for \$18,000 school building recently noted; two-story brick structure; eight rooms and auditorium; steam heat; I. N. Wilkinson, Mayor.

Brookhaven, Miss.—City awarded contract to West, Rutter & Welch, Brookhaven, for erection of school for negroes; plans by Eugene McCormick; two-story frame structure; 72x87 feet; lighting not decided; cost \$5500. (Contractor's name incorrect in recent notice.)

Calhoun, La.—City has voted special tax to erect agricultural high school. Address The Mayor.

Christoval, Texas.—Christoval Independent School District will erect two-story stone and brick school building; cost \$7000; Jas. Ford, secretary board of trustees.

Clairemont, Texas.—School Board, B. L. Glenn, secretary, will open bids about August 1 (postponed date) for erection of school building recently mentioned; two-story, 40x80-foot concrete structure; cost \$7500; plans by Harry R. Wagoner, Clairemont.

Clinton, Miss.—Mississippi College contemplates erection of science building to cost \$50,000; plans by R. H. Hunt, James Bldg., Chattanooga, Tenn.; George E. Kessler, St. Louis, Mo., landscape architect.

Cloverport, Ky.—School Board, T. L. Lightfoot, president, will erect proposed \$3000 addition to school building by days' labor; two stories; 36x48 feet; ordinary construction; brick; steam heat. (See "Machinery Wanted.")

Columbia, S. C.—University of South Carolina awarded contract at \$45,427 to George W. Waring, Columbia, for erection of laboratory recently mentioned; 150x65 feet; plans by Wilson, Sompayrac & Urquhart, 1302 Main St., Columbia.

Davidson, N. C.—Davidson College had plans prepared by Hook & Rogers, Charlotte, N. C., for \$20,000 library building; brick and Bedford stone; 55x60 feet; ordinary fireproof construction; stackroom and vault; steam heat; electric lighting; date of opening bids not decided.

Denton, Texas.—Board of trustees of the North Texas Normal College, Denton, will receive bids until August 24 for plans and specifications for college building; cost, including architect's commission, not exceeding \$35,000; J. T. Bottorff, secretary; Emory C. Smith, Alvin C. Owsley, J. T. Bottorff, trustees.

Denton, Texas.—Standard Business College contemplates erection of \$25,000 school.

Evergreen, La.—St. John the Baptist parish will open bids August 4 for erection of schools costing about \$4000 each at Evergreen, Lions and Mt. Airy; frame construction; two stories; slate roofs; brick foundations; lath and plaster; probably acetylene gas lighting; J. Chas. Valadie, architect, 810 Hennen Bldg., New Orleans, La.; will received bids on any part of work; general bids to be addressed to A. C. Bernard, Jr., superintendent School Board, Edgard, La. (Recently mentioned.)

Fullerton, Ky.—City has voted \$3500 of bonds to erect school. Address The Mayor.

Garza, Texas.—City has voted \$4000 of bonds to erect school. Address The Mayor.

Green Spring Depot, Va.—Kinsolver & Huddle, Bristol, Va.—Tenn., have contract, at \$3200, for rebuilding burned academy.

Guilford College, N. C.—Guilford College awarded contract to John T. Hunt & Co., Greensboro, N. C., for erection of college building recently mentioned; brick and stone structure; 60x80 feet; ordinary construction; steam heat; electric lighting; cost \$25,000; plans by Hook & Rogers, Charlotte, N. C.

Hardin, Ky.—City will erect \$5000 high school. Address The Mayor.

Hartshorne, Okla.—Bids will be received until August 10 by A. M. Gooch, clerk Board of Education, for constructing 10-room brick school; certified check for \$500; also at same time for heating; certified check for \$300, and for plumbing and wiring, certified check for \$200; all checks to be made payable to said clerk; plans and specifications on file at office of clerk and of Smith & Parr, architects, McAlester, Okla.; J. P. Grady, president. (See "Machinery Wanted.")

Iota, La.—School building, contract recently noted awarded to E. Miller, Eunice, La., will be brick 54x114-foot structure; semi-fireproof; hot-air heat; contract price, \$13,775; plans by R. A. Nockton, Crowley, La. (See "Machinery Wanted.")

Jacksonville, Texas.—City has voted \$25,000 of bonds to erect school; brick, stone or concrete. Address The Mayor.

Kentwood, La.—City has plans by R. H. Hunt, Chattanooga, Tenn., for erection of proposed high school; three stories and basement; cost \$17,000; Leo Decoux, Mayor.

Leakesville, Miss.—City has voted \$7000 of bonds to erect school. Address The Mayor.

Lions, La.—St. John the Baptist parish had plans prepared by J. Chas. Valadie, 810 Hennen Bldg., New Orleans, La., for two-story frame school building recently mentioned; cost \$4000; will open bids August 4. (See "Evergreen, La.")

Logan, W. Va.—City awarded contract at \$7480 to Charles Bennett, Logan, for erection of proposed addition to school.

Lubbock, Texas.—School trustees will expend \$25,000 in erection of school building recently mentioned; plans by Taylor & Mount, Lubbock; 15-room building; Coffeyville press brick; 80x84 feet; mill construction; steam heat; bids opened August 2. (See "Machinery Wanted.")

Martinsburg, W. Va.—City awarded contract, at \$10,000, to S. A. Westenhaver, Martinsburg, for erection of addition to high school recently mentioned; one story; five rooms.

Montgomery, Ala.—Woman's College of Alabama, W. E. Martin, president, accepted plans by Warren & Smith, Boston, Mass., for proposed college building.

Mt. Airy, La.—St. John the Baptist parish will open bids August 4 for erection of two-story frame school building recently mentioned; plans by J. Chas. Valadie, 810 Hennen Bldg., New Orleans, La. (See "Evergreen, La.")

Murphy, N. C.—Bids will be received until August 20 for erection of brick school; 65x104; main building two stories, with two end rooms one story, 20 feet long; ordinary construction; steam heat; electric lights; certified check for \$500; plans and specifications on file at office of Cunningham Bros., architects, Greenville, S. C.; further particulars from A. A. Fain, Murphy.

Nashville, Tenn.—Nash county is planning to erect two dormitories at Mt. Pleasant and Red Oak. Address County Commissioners.

Quannah, Texas.—City voted \$10,000 of bonds for erection of brick school building on North side. Address The Mayor.

Plaquemine, La.—Iberville parish will levy tax for erection of school. Address Police Jury.

Raleigh, N. C.—Peace Institute awarded contract to John W. Coffey, Raleigh, for erection of 10-room dormitory; cost \$5000; plans by Barrett & Thompson, Raleigh.

Rayne, La.—City has voted \$26,000 of bonds to erect school. Address The Mayor.

Roanoke, Va.—High-school building, contract recently noted awarded to J. F. Barbour & Co., Roanoke, will be three-story-and-basement structure; 55x75 feet; steam (direct and indirect) heat; electric and gas lighting; ordinary construction; cost \$15,000; plans by H. H. Huggins, Roanoke. (See "Machinery Wanted.")

Roby's (not a postoffice), Md.—Bids will be received until July 31 to erect school; plans and specifications on file at office of George F. Stansbury, architect, 9-10 Citizens' National Bank Bldg., Cumberland, Md.; A. C. Willson, secretary Board of School Commissioners, Cumberland.

Rockwood, Tenn.—City will vote August 21 on bonds for erection of school building; J. N. Baker, chairman Board of Education. (Recently mentioned.)

Scott County, Ky.—Scott County Board of Education will receive bids until August 2 for erection of three schools at Burr Oak, Muddy Ford and Stonewall, Ky.; plans and specifications on file at office of County Superintendent; J. R. Lancaster, chairman, Georgetown, Ky.

Seagoville, Texas.—Bids will be received until August 1 for erection of school; two stories; brick; certified check for \$200; plans and specifications on file at office of Board of Education, Seagoville, and of C. A. Gill & Son, architects, Dallas, Texas.

St. Louis, Mo.—Board of Education awarded contract at \$210,000 to E. O. Gerhard, St. Louis, for erection of proposed Franklin School; 201x171 feet; plans by William B. Itner, St. Louis.

Van Alstyne, Texas.—City will vote August 17 on \$12,500 bond issue to erect school, for which plans are being prepared by John Tulloch, Sherman, Texas. (Recently mentioned.)

Waco, Texas.—City will soon vote on \$140,000 bond issue to erect high school. Address The Mayor.

Walterboro, S. C.—City has voted issuance of \$20,000 bonds for schools. Address The Mayor.

Whitehaven, Tenn.—Shelby county awarded contract to M. J. Lutz & Bro. for erection of \$6000 school buildings at Whitehaven and Cuba, recently mentioned (under Shelby County); two-story brick buildings; ordinary construction; F. E. Miller, chairman Board of Education, Memphis, Tenn.

Whitesburg, Ky.—Letcher County Board of Education will erect \$12,000 college building; contract to be let at once; James S. Pendleton, county superintendent.

Wilmer, Texas.—Dallas county has voted \$6000 of bonds to erect school at Wilmer and \$4000 to erect school at Lagow. Address County Commissioners, Dallas, Texas.

THEATERS

Anniston, Ala.—A. R. Noble, care New Noble Theater Bldg., awarded contract to Roney & Atkinson, Richmond, Va., for erection of \$40,000 structure to replace building recently reported burned; 1300 seating capacity; theater on ground floor; offices above; 35x64-foot stage; Alabama marble in lobby; fireproof; steam heat; electric lighting; plans by Okel & Cooper, Montgomery, Ala.

Baltimore, Md.—Paul Emmart, 210 West Fayette St., Baltimore, has completed plans for moving picture and vaudeville theater at Baltimore and Calvert streets for The Garden Company; structure to be of concrete and steel; seating capacity, 1800; equipped with system of forced ventilation with both warm and cold air; company is represented by Parr & Parr, 219 East German St., Baltimore. (Recently mentioned.)

Johnson City, Tenn.—J. A. Denton purchased site 60x100 feet, on which to erect opera-house; entrance to be 20 feet wide and 60 feet long; storeroom on each side; auditorium 55x100 feet, with seating capacity of 2500; cost \$35,000.

Louisville, Ky.—Contract for erection of superstructure of Walnut Street Theater will be let about August 15; fireproof building; cost \$80,000; foundation in place; plans and supervision by Kenneth McDonald and W. J. Dodd, 1500 Lincoln Savings Bank Bldg., Louisville. (Previously mentioned.)

Ocala, Fla.—Marion Dunn Lodge, W. V. Wheeler, secretary, will erect Masonic hall and opera-house after plans by George Mackay, Ocala; cost \$17,000; bids to be opened August 20. (See "Miscellaneous Structures.")

WAREHOUSES

Baltimore, Md.—Louis S. Goldbloom, 613-615 West Baltimore St., will erect addition to

store building; brick; 22x76 feet; mill construction; concrete foundation; will be used as warehouse and showrooms; plans by Callis & Callis; contract awarded B. W. & E. Minor, 224 West Pratt St., Baltimore.

Bay City, Texas.—Union Warehouse & Elevator Co. awarded contract for addition to rice warehouse costing \$6000.

Harrisonburg, Va.—John E. Sullivan will erect warehouse; 100x26 feet; three or four stories.

Harrisonburg, Va.—Valley Produce Co. has begun erection of proposed warehouse; four stories; brick; 80x42 feet; cost \$8000.

Macon, Ga.—Consolidated Warehouse Co. incorporated with \$25,000 capital stock by W. H. O'Pry, B. F. Smith and T. R. Hendricks.

Macon, Ga.—Alamo Lumber & Shingle Co. will erect storage warehouse.

Mebane, N. C.—Mebane Tobacco Warehouse Co. incorporated by B. F. Warner and others.

Monticello, Miss.—Monticello Compress & Warehouse Co., John H. Arrington, president, will erect 200x300-foot building. (See "Cotton Compresses and Gins.")

New Madrid, Mo.—Farmers' Warehouse Co. incorporated with \$2000 capital stock by Davis B. Biley, William Graham, William Shy & others.

Norfolk, Va.—Jones & Co. purchased Nottingham and Wrenn wharf property in Atlantic City ward; frontage 331 feet on Elizabeth River; depth 650 feet to front street; extends along this street 425 feet; plans are prepared by Neff & Thompson of Norfolk for warehouses; two stories; fireproof; reinforced-concrete construction; cost \$50,000.

Selma, Ala.—Birmingham & Gulf Railway & Navigation Co., through R. L. Ellis, manager Selma Street & Suburban Railway Co., contracted for \$7000 worth of machinery, including elevators, cranes, etc., to be used in connection with new wharf and warehouse. (Previously mentioned.)

Texas City, Texas.—The Texas City Company, A. B. Wolvin, president, Duluth, Minn., has awarded further contracts on construction and equipment of warehouses, etc., in connection with improvements previously fully described; to Harnischfeger Company, Milwaukee, Wis., for installation of 12 traveling cranes in the five warehouses; Westinghouse Company, Pittsburgh, Pa., for 1000-kilowatt electric-power plant, to furnish power for electric motor switch engines; tile roofing and wireglass contract to Federal Cement Tile Co., Chicago, Ill., at \$25,000 for tile roofing; bids are being asked on water-works plant, for water supply and fire protection; as previously stated, contract for steel work let to American Bridge Co., Pittsburg, Pa.

Winston-Salem, N. C.—P. H. Hanes Knitting Co. awarded contract to Fogle Bros., Winston, for erection of warehouse; architect, Willard C. Northrop of Winston. (Late-ly mentioned.)

RAILROAD CONSTRUCTION

RAILWAYS

Anniston, Ala.—Capt. R. F. Kolb is organizing the Shinnbone Valley Iron & Timber Co. with \$600,000 capital to develop timber and mineral lands in Shinnbone Valley, and will build a railroad connecting with the Southern Railway at Pylon and extending to Abel, 16 miles, and later to De Armanville. Others interested are O. M. Alexander of Anniston, Ala.; W. B. Davidson of Montgomery, Ala.; P. M. Clark and C. W. Huffman of Lebanon, Tenn., and others of Boston. J. D. Hunter is engineer.

Argenta, Ark.—The St. Louis, Iron Mountain & Southern Railroad (Missouri Pacific system) is reported to have let contract to J. J. Ball for second track between Argenta and Bald Knob, 15 miles, of which five miles are already completed by the company.

Athens, W. Va.—The Mercer Electric Railway Co., R. G. Meadon, president, will, it is announced, receive bids between August 5 and August 10 for grading six or seven miles of line from Athens to Princeton, W. Va.

Bartlesville, Okla.—An official of the Atchison, Topeka & Santa Fe Railway says that the company is making changes in the Bartlesville yard and is also erecting a new passenger station.

Batesville, Ark.—A meeting has been held to promote plans for a railroad from Batesville to points in the eastern part of the State. Mayor D. H. Coleman, A. A. Webber, M. C. Weaver and R. W. Earnheart are among those interested.

Bellamy, Ala.—The Sumter & Choctaw Railway has just let contract for a two-mile extension southward to the Lewis Ferry road.

Boonville, Mo.—The Missouri Pacific Rail-

way, it is reported, will rebuild the Boonville, St. Louis & Southern Railroad between Boonville and Versailles, Mo., 44 miles. E. F. Mitchell is engineer of construction, St. Louis, Mo.

Brady, Texas.—W. B. Drake, vice-president and superintendent of the Frisco system, Fort Worth, Texas, is quoted as saying that a line will be built from Brady toward San Antonio and survey will begin immediately. M. C. Byers is chief engineer at St. Louis, Mo.

Causey, N. C.—Construction is reported progressing upon the Bonlee & Western Railroad, which has several miles cleared and a mile or so graded. I. H. Dunlap and J. H. Dunlap of Causey are interested.

Charleston, W. Va.—James M. Payne of Charleston is reported as saying that Charleston & Northeastern Railroad will be built as soon as rights of way can be secured. Line will run from Clendennin to Walton, W. Va., about 20 miles.

Clarksville, Tenn.—A movement is reported under way to build an interurban railway connecting Clarksville with Hopkinsville, Ky. Among those reported interested are I. H. Jackson of Indianapolis, Ind., representing the Burns Construction Co. of Chicago; F. G. Hoge, secretary and treasurer of the Ideal Construction Co., Hopkinsville, Ky.; A. H. Eckels, James West, Douglas Bell, Charles Mechem and others of Hopkinsville. W. A. Chambers & Co. of Clarksville are also reported interested.

Clinton, Miss.—D. N. McLean, president of the Bank of Clinton, writes confirming the report that it is contemplated to build a railway between Clinton and Jackson, Miss., about 10 miles. About three miles will be in the city.

Crossett, Ark.—The Crossett Railroad Co. has been chartered with \$25,000 capital and may build an extension. It now has 10 miles of line from Crossett, on the St. Louis, Iron Mountain & Southern Railroad northward 10 miles. The incorporators are E. W. Gates, A. Trieschman, J. C. Norcott, C. W. Gates and E. S. Crossett.

DeQueen, Ark.—Work is being pushed, according to a dispatch, on the extension of the DeQueen & Eastern Railroad between DeQueen and Vallant, Okla. Survey will soon be finished; six miles of track have been laid and 15 miles graded at the Vallant end.

DeQueen, Ark.—The Kansas City Southern Railroad is reported to have completed survey for a cut-off from DeQueen to Neal Springs, and construction will soon begin. A. F. Rust is engineer at Kansas City, Mo.

Deport, Texas.—Graders are reported at work between Blossom and Deport for a railroad promoted by C. T. Moore of Clarksville. The line is referred to as the Oklahoma, Red River & Texas Railroad.

Eubanks, Okla.—The King Lumber Co. has completed surveys for about 15 miles of railroad from Eubanks to Johns Valley, Okla. D. W. Spooner of Joplin, Mo., is engineer in charge.

Fayette, W. Va.—The Fayette Public Service Corporation, according to official information, will build a line about five miles long from Stuart to Fayetteville, W. Va. Survey is not complete and date for beginning construction is not set. J. P. Davis is president and general manager at Glen Jean, W. Va. R. J. Stegall and others are also interested.

Franklin, La.—The Franklin & Abbeville Railroad is reported building from Davids Switch to Royville, and will continue the work to Milton, on Bayou Vermillion, W. Y. Kemper is chief engineer, at Franklin, La.

Fredericksburg, Va.—An officer of the Potomac, Fredericksburg & Piedmont Railroad says that the \$750,000 bond issue for improvements and equipment is for refunding and not for new work.

Fredericksburg, Va.—E. H. Randall of Stafford, Va., is reported surveying for a railroad from Coal Landing to the Austin Run mines, three miles.

Gallatin, Tenn.—C. H. Fidler of Gallatin is reported promoting a plan for a railroad, the Gallatin & Suburban Railway, from Gallatin to Cumberland, Tenn.

Galveston, Texas.—The Gulf & Interstate Railway (Santa Fe system) is reported to have lost several miles of track by the flood, and the company's other lines also sustained damages. C. F. W. Felt is chief engineer at Galveston, Texas.

Glen Jean, W. Va.—The McKell Coal & Coke Co. of Glen Jean is reported to have let contract to W. O. Lipscomb of Roanoke, Va., to build three miles of railroad for coal development.

Grayson, Ky.—It is officially denied that the Eastern Kentucky Railway Co. will build an extension. The company has not

sent out engineers and it has no expectation of doing any construction. This relates to a recent press report.

Greenville, Tenn.—Leroy Park & Co. write that a company has not yet been organized for the proposed railroad from Kingsport, Tenn., via Greenville, in Green county, to the French Broad River, 60 miles. Only preliminary surveys have been made showing light work, good grade, only one tunnel and two river bridges.

Hamburg, Ark.—The Arkansas, Louisiana & Gulf Railway, says an official, is considering a proposition to build from Hamburg to DeValls Bluff, Ark.

Hamilton, Texas.—W. A. Bradshaw of Waco is reported interested with others in a plan to build a railroad from Hamilton to Georgetown, Texas.

Hannibal, Mo.—An official is reported as saying that the Mexico, Perry & Santa Fe Railroad Co. has finished surveys and secured right of way for its proposed interurban line from Hannibal to Columbia, Mo., via Oakwood, New London, Centre, Perry, Santa Fe, Moline, Mexico and Hereford. A branch from Hereford to Fulton is also projected; total length, 103 miles; extension to Jefferson City is contemplated; headquarters at Mexico, Mo.; Matthias Crum, president; C. C. Helzer, vice-president; W. W. Botts, treasurer. Richard H. Phillips, Security Bldg., St. Louis, Mo., is consulting engineer.

Houston, Mo.—The St. Louis & Houston Mineral Belt Railway Co. has been chartered with \$400,000 capital to build a line from Houston to Cabool, Mo., about 16 miles. The stockholders are A. H. Johnson of Springfield, Mo.; M. G. Coyle, A. E. Leavitt, Clark Dooley, Robert Lamar, W. T. Elliott, C. F. Speak, R. A. Harrington, E. K. Lyles, all of Houston, Mo.

Houston, Texas.—Reported that construction will begin within 60 days on the Houston & Galveston Interurban Railway, to be built by the Stone & Webster Engineering Corporation, and that Mark Lowd of Dallas, Texas, will be engineer in charge.

Houston, Texas.—The Westmoreland Railroad Co., capital \$40,000, has been chartered to build a line from Houston to Bellaire, seven miles. The incorporators are W. W. Baldwin, Max Eggert, Burlington, Iowa; A. J. Condit, R. B. Henderson and W. G. Sears of Houston, Texas. Either electric cars or gasoline motors will be used.

Jasper, Ark.—L. S. Powers, promoter of the North & South Railroad Co., which proposes to build a line from Bergman to Fort Smith, is reported as saying that the line has been financed by William Umbenhauer, and surveys will begin as soon as some right-of-way questions are settled.

Kansas City, Mo.—The directors of the Kansas City Terminal Co. are reported to have accepted the ordinance of the Kansas City Council for constructing a \$20,000,000 depot. Details not yet settled. H. L. Harmon, president of Kansas City Belt Railway, is president. The voters of Kansas City will have to approve the plan before it is effective.

Kansas City, Mo.—The Kansas City Southern Railway, it is reported, will spend \$1,000,000 for grade reduction between Bunch and Houston, Okla., and DeQueen and Shreveport, La. Some curvature will also be eliminated. About \$250,000 will be spent on the Kansas City terminals. About \$500,000 will be used for ballasting, additional passing tracks and new terminal tracks. A. F. Rust is resident engineer at Kansas City, Mo.

Leslie, Ark.—The H. D. Williams Cooperage Co. is reported to have begun work on a five-mile extension of its railroad along Little Red River, which will make the line 20 miles long.

Louisla, La.—Reported that the J. M. Burgulere Company, Ltd., sugar manufacturers, contemplate building a railroad from New Iberia to Milton, La., and have secured an option on the right of way of the proposed Louisiana Central Railroad.

Macon, Ga.—An officer of the Atlanta & West Point Railroad Co., referring to the report that it will build a line from Sofkee to Macon, writes that there is nothing definite at present. Only some tentative inquiries have been made.

Marked Tree, Ark.—An officer of the Marked Tree, Newport & Western Railway Co. is quoted as saying that contracts will be let about September 1 to build from Marked Tree via Harrisburg, Waldenburg and Wynne, about 40 miles. E. Ritter is president and C. B. Bailey chief engineer, the latter at Wynne, Ark.

Maysville, Ky.—The Kentucky Coal Co., it is reported, contemplates building a branch

railroad in the eastern part of Kentucky to connect with either the Louisville & Nashville or the Chesapeake & Ohio. Harry P. Jones, president of the Big Hill Coal Co., Cincinnati, Ohio, is said to be interested.

McComb, Miss.—N. A. Wall of Nashville, Tenn., is reported promoting a plan to build a railroad through the valley of the Amite River via Liberty and probably to Baton Rouge, La.

Morris Ferry, Ark.—The Arkansas, Oklahoma & Paris Railway Co. has been chartered to build a line from Morris Ferry into Oklahoma and Texas. The first section is from Morris Ferry to Moon, Okla., and thence to Harris Ferry, altogether about 30 miles. The incorporators are: P. S. Brown and W. S. Proyer of Kansas City, J. M. Johnson, A. D. Dulaney and W. E. Kinsworthy of Ashdown, Ark.

Mullins, W. Va.—The Virginian Railway, it is reported, proposes to build about 23 miles of branches, including the following: Stone Coal branch, three miles long; Laurel Fork extension, three miles; Devil's Fork branch, six miles; Upper Stone Coal branch, two miles; Tommy Creek branch, four and three-quarters miles; Piney Creek extension of Winding Gulf branch, eight miles. H. Fernstrom is chief engineer at Norfolk, Va.

Muskogee, Okla.—The Missouri, Oklahoma & Gulf Railroad, it is reported, will build its contemplated extension from Muskogee to Joplin as soon as the line is completed to Sherman, Texas. E. J. Noonan is chief engineer at Calvin, Okla.

New Iberia, La.—Construction is reported begun at Port Barre, La., for the New Iberia, St. Martins & Northern Railroad, projected by F. M. Welch of New Orleans. R. L. Lockwood of St. Louis is chief engineer. P. M. Johnston, Son & Allhands of St. Elmo, Ill., are the contractors.

Orlando, Fla.—The Central Florida Traction Co. is reported to be the name of the proposed line, 45 miles long, to connect Sanford, Winter Park, Orlando and Kissimmee. The officers are M. O. Overstreet, president; D. B. T. Bennett, first vice-president; Dr. J. H. Smith, second vice-president; W. A. Smith, treasurer; L. L. Payne, secretary; A. N. McKinley, general manager; directors, E. F. Sperry, A. McCallum, Dr. R. A. Howard and T. P. Warlow. J. P. Hornaday and W. A. McClintock of New York are reported investigating the plan, for which it is said part of the right of way has been obtained.

Pageton, W. Va.—The Norfolk & Western Railway is reported to have completed an extension of the Tug Fork branch from Pageton to Anawalt, three miles. Another section of the same branch has been opened from Gary to Filbert, W. Va., five miles.

Paintsville, Ky.—Contract for the Miller's Creek Railroad of the Consolidation Coal Co. is reported let to Dr. M. G. Watson, Dr. W. L. Walter and P. C. Turner. At present three and one-half miles will be built.

Pawhuska, Okla.—The Oklahoma & Golden City Railroad Co. projects a line from Enid, Okla., to Jefferson City, Mo., 375 miles. Partial surveys have been made. Reported that construction in Missouri will be started on 28 miles of line next month. W. S. Hawkins, Pawhuska, Okla., is chief engineer.

Plainsville, Ky.—The Louisville & Nashville Railroad is reported to have bought the Straight Creek Railroad, and will build a six-mile extension. W. H. Courtenay is chief engineer at Louisville, Ky.

Quanah, Texas.—A letter says it is desired to secure a railroad promoter to build a line northwest and southeast out of Quanah. Chris Hagelstein may be addressed.

Quitman, Ga.—A temporary organization is reported for the Quitman, Monticello & Tallahassee Railway Co.; E. J. Young, president; W. W. Walker, vice-president; C. T. Tillman, secretary and treasurer.

Ripplemead, Va.—The Norfolk & Western is reported to have completed 11 miles of line on the Potts Creek extension, which will be 39 miles long, from a point near Ripplemead to Paint Bank.

Rome, Ga.—Burke & Joseph, general contractors for the Rome & Northern Railroad, says a letter, have sublet grading to Hill Bros. of Memphis, Tenn., who are preparing to get on the work. W. B. Arnold is local representative for Burke & Joseph.

Salisbury, N. C.—B. B. Miller and T. J. Jerome are reported interested in a plan to build a railroad from Salisbury to Monroe, N. C.

San Angelo, Texas.—J. J. Lanin is reported as saying that a company has not yet been organized to build his proposed railway from San Angelo to Carlsbad and Sterling City, but it is intended to begin work August 15. W. H. Shaffer is president and A. H. Shaffer vice-president of the preliminary organization.

J. J. Lanin is manager. Address New Hampton, Iowa.

Scottsboro, Ala.—M. J. Bobo is reported interested with others in a plan to build a standard-gauge railroad to develop lands on Sand Mountain.

Shreveport, La.—Concerning the report that a railroad is contemplated from Memphis to the Gulf of Mexico, a letter to the Manufacturers' Record says nothing has been done yet, but that J. G. Curtis of Indiana contemplated building from Memphis, Tenn., to Houston, Texas, possibly via Shreveport. S. J. Zeigler, secretary of the Shreveport Progressive League, Shreveport, La., is among the local parties interested.

Spartanburg, S. C.—The Carolina, Clinchfield & Ohio Railway has not yet decided upon the character of its terminal facilities for Spartanburg. M. J. Caples is chief engineer; W. F. Steffens is engineer bridges and buildings, both at Johnson City, Tenn.

Tampa, Fla.—The application to charter the Tampa & Gulf Coast Railway says that the line will be 20 miles long from Lutz, on the Tampa Northern Railway, to a point at or near Tarpon Springs; capital \$250,000. Of this, 10 miles are already built, as heretofore reported. The incorporators are Charles H. Brown and C. H. Tedder of Tampa, Thomas Dowling of Live Oak, C. H. Lutz of St. Petersburg and John K. Cheyney of Tarpon Springs, Fla.

Vilas, Ky.—J. L. Proctor of Vilas, Ky., manager of the VanSant-Kitchen Lumber Co.'s plant at Moore's Branch, will, it is reported, build two miles of lumber railroad for hauling logs.

Winston-Salem, N. C.—The directors of the Winston-Salem Southbound Railway Co. have elected officers thus: H. E. Fries, president, Winston-Salem, N. C.; T. M. Emerson, vice-president, Wilmington, N. C.; H. F. Wilkinson, secretary, Roanoke, Va.; W. F. Shaffer, treasurer; M. H. Willis, auditor, both of Winston-Salem, N. C. These appointments were confirmed: E. T. Burnett, purchasing agent, Roanoke, Va.; O. H. P. Cornell, chief engineer, Winston-Salem, N. C.

STREET RAILWAYS

Algiers, La.—The Algiers Railway & Lighting Co. will, it is reported, build an extension to the site of the proposed immigration station. R. S. Stearnes is general manager, at 222 Elmira Ave., Algiers.

Birmingham, Ala.—W. J. Cameron, F. Y. Anderson, George C. Kelley and others have applied for a street railway franchise.

Charleston, W. Va.—The Kanawha Valley Traction Co., it is reported, is building an extension from Charleston via Parkland to St. Albans.

Chattanooga, Tenn.—The Chattanooga Railway & Light Co. has applied for a charter and will merge the Chattanooga Railways Co. and the Chattanooga Electric Co., as heretofore reported. Those interested are Foster V. Brown, Frank Spurlock, Joe Brown, J. C. Lightfoot, Jr., T. G. Newman, M. J. Horan and W. E. Boleau.

Corpus Christi, Texas.—Two applications for street railway franchises have been made by Daniel Hewitt and Simon Smith, respectively.

Gainesville, Ga.—The Gainesville Railway, Light & Power Co. has been chartered to build a street railway from the Gainesville Cotton Mills through the city to New Holland and Chattahoochee Park. The incorporators are W. A. Carlisle, W. H. Slack, H. H. Dean, A. S. Hardy and others of Gainesville.

Gainesville, Ga.—The Gainesville Railway & Power Co., capital \$150,000, has been granted a charter to take over the Gainesville Electric Railway, eight miles long, and it may make extensions.

Marshall, Texas.—The Marshall (Texas) Traction Co. is reported organized to build an electric railway; capital \$25,000; stockholders are Marvin Turney, F. H. Prendergast, John Copeland and others.

Tulsa, Okla.—The Tulsa Street Railway Co. is reported to have agreed to build an extension to Kendall College and have it completed by September 15.

The Vulcan Supply Co.

The Vulcan Supply Co., 120-122 Sycamore St., Cincinnati, Ohio, has taken the agency for the Diamond Rubber Co., Akron, Ohio, and will handle the Indian Red sheet packing, the Titan stitched rubber belting and the different Diamond brands of hose for water, steam, air, suction, pneumatic, brewers' and fire use. With these the company also handles the other rubber specialties including saw bands, perforated mats and automobile tires.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—Ohio Drilling Co., 8 Pille Block, Massillon, Ohio, wants second-hand air compressor; belted; capacity, 100 feet air at 125 pounds pressure.

Air Compressor, etc.—Nilson Yacht Building Co., Ferry Bar, Baltimore, Md., wants catalogues and prices on air compressor and tools.

Air Compressor.—C. W. Lyon, care of Kansas City Brick & Stone Co., Kansas City, Mo., wants belt-driven air compressor with capacity to operate one large air drill and one "baby" drill for light work.

Alfalfa Mill.—T. A. Threlkeld, Wynnewood, Okla., wants prices on alfalfa mill.

Bank Fixtures.—I. H. Lutterloh, Sanford, N. C., wants prices on bank fixtures.

Barber-shop Equipment.—I. H. Lutterloh, Sanford, N. C., wants prices on barber-shop equipment.

Blackboards.—See "Slate Blackboards."

Boiler.—G. T. & W. J. Flynn, 111 North Water St., Wilmington, N. C., want prices on new or second-hand 60x16 marine boiler; to be set in casing.

Boiler.—See "Electric Equipment."

Boiler.—Roanoke Column & Lumber Co., 407 Terry Bldg., Roanoke, Va., wants new or second-hand 80-horse-power fire-box boiler.

Boiler.—See "Engine and Boiler."

Boilers.—Office Commissioners District of Columbia. Proposals will be received until August 2 for furnishing and installing two horizontal tubular steam boilers in basement of Dennison School, 8 street, between 13th and 14th streets northwest; for forms of proposal and necessary information apply to Chief Clerk, Engineer Department, Room 427, District Building; Henry B. F. Macfarland, Henry L. West, William V. Judson, Commissioners District of Columbia.

Boilers.—See "Government and State Buildings" under Corsicana, Texas.

Bottles, etc.—J. M. Howard, Sharp, Ark., wants bottles and corks.

Canning Machinery, etc.—N. K. Freeman, McAdoo, Texas, wants catalogues and prices on cannery machinery and supplies.

Brick.—Taylor & Mount, Lubbock, Texas, want prices on brick.

Brick Machinery.—N. K. Freeman, McAdoo, Texas, wants catalogues and prices on mud-brick machinery.

Bridge Construction.—E. J. Rankin, L. A. Searbrough and Frank U. Garrard, Commissioners Muscogee County, Columbus, Ga., and R. A. Mizell, J. B. Mathews and W. T. Dennis, Commissioners Talbot County, Talbotton, Ga., will receive bids until August 20 for erection of bridge over Baker Creek, between counties of Muscogee and Talbot, on Macon road; bids to be as follows: First, wooden bridge, covered; second, wooden bridge, uncovered; third, steel bridge, uncovered. Plans and specifications on file in offices of Ordinaries of Muscogee and Talbot counties, who are clerks Boards of Commissioners Roads and Revenues of said counties.

Bridge Construction.—Washington County Commissioners, Hagerstown, Md., will open bids August 3 for furnishing material and labor for construction of reinforced-concrete bridge over Beaver Creek; plans and specifications on file in office of commissioners; certified check or draft for \$200; John E. Wagaman, clerk.

Broom Machinery.—T. A. Threlkeld, Wynnewood, Okla., wants prices on broom machinery.

Building Materials, etc.—E. Miller, Eunice, La., wants brick, lime, cement, cast-iron fittings, bolts, slate, tin work and plastering for \$12,775 school building, Iota, La.

Building Materials.—Casey & Miller, Texarkana, Ark., want prices on slate, terracotta, steel and iron and reinforcing for \$50,000 school building at Minden, La.

Building Novelties, etc.—Unaka Manufacturing Co., Johnson City, Tenn., wants agents or jobbers' prices on hardware or building novelties.

Canal Construction.—Canal and River Commissioner, F. B. Pope, chairman, Augusta, Ga., will open bids August 17 for furnishing material, tools and labor and excavating drainage canal $3\frac{1}{4}$ miles long, 30 feet wide and 6 feet deep; certified check, \$500; Nisbet Wingfield, chief engineer.

Canning Machinery.—Wade Colonization Co., Suite 315, State National Bank Bldg., Texarkana, Ark., wants data on establishment of fruit and vegetable cannery.

Cans, etc.—T. A. Threlkeld, Wynnewood, Okla., wants prices on cans and labels.

Cars.—See "Mining Machinery."

Castings.—See "Machines."

Clock.—Town of Paris, Ark., wants tower clock. Address Geo. M. Zeller, chairman finance committee.

Columns, etc.—W. J. Sneed Lumber Co., Greenwood, S. C., wants 24-inch by 20-foot 6-inch and 12-inch by 9-foot built-up columns with composition capitals.

Composition Board.—Columbus Showcase Co., Columbus, Ga., wants to correspond with manufacturers of composition board suitable for showcase bases, etc.

Concrete Mixer.—Morrison Machinery & Supply Co., Richmond, Va., wants concrete mixer; medium capacity; steam or gasoline engine.

Conveying Machinery.—C. W. Lyon, care of Kansas City Brick & Stone Co., Kansas City, Mo., wants conveyor belt and frame complete; belt 30 inches wide and 150 feet long.

Cotton Gin.—A. W. Van Valkenburg, Honolulu, Hawaii, wants information and prices on machinery for Sea Island cotton gin.

Cotton-mill Machinery.—Kinarivala Bros. & Co., 1523 Raja Mehta St., Ahmedabad, India, want agencies for machinery for spinning and weaving mill equipments—spindles, looms, shuttles, bobbins, spools, harness, ring travelers, etc., etc.

Crushers.—C. W. Lyon, care of Kansas City Brick & Stone Co., Scarritt Bldg., Kansas City, Mo., wants three gyratory crushers.

Dikes and Revetment.—U. S. Engineer Office, Kansas City, Mo. Sealed proposals for construction of 8260 feet pile dikes and 4000 feet revetment on Missouri River between Kansas City and mouth will be received until August 16. Information furnished on application. Edward H. Schulz, Major, Engineers.

Ditching Machinery.—W. E. Still, secretary Senatobia Creek Drainage Co., Senatobia, Miss., wants to correspond with users of ditching machines for canals; has 10 to 11 miles to cut.

Drill.—C. W. Lyon, care of Kansas City Brick & Stone Co., Scarritt Bldg., Kansas City, Mo., wants keystone drill complete with bits for three-inch hole.

Electric Conducts and Wiring.—See "Government and State Buildings" under Paris, Ky.

Electric-light Plant.—See "Water-works."

Electric-light System.—See "Water-works, etc."

Electric Machinery and Tools.—Nilson Yacht Building Co., Ferry Bar, Baltimore, Md., wants catalogues and prices on motors and electric hand tools.

Electrical Machinery.—Armas Durio, Opelousas, La., wants direct-connected unit, 150 kilowatt, 1122 volts, 60 or 133 cycles.

Electrical Machinery.—Binghamton Light & Power Co., W. M. Tucker, manager, Binghamton, Tenn., wants prices on 150 or 250-kilowatt generator, with 125-horse-power return-tubular boiler and 13x14-inch automatic cut-off 270 R. P. M. engine.

Electrical Machinery.—Lubbock Light & Ice Co., R. B. Ellis, general manager, Lubbock, Texas, will open proposals about August 1 for 75-kilowatt A. C. 1100-volt single-phase equipment.

Electrical Machinery.—C. W. Lyon, care of Kansas City Brick & Stone Co., Scarritt Bldg., Kansas City, Mo., wants two 50-kilowatt direct-current motors.

Electrical Machinery.—City of Monett, Mo., wants bids for additional electric-light-plant equipment, including Corliss engine, 225 horse-power, 125 H. W. pressure; three tubular boilers; feed-water heater; 90-horse-power H. S. automatic engine; generators, 150-kilowatt, three-phase, 60-cycle, 90-kilowatt, direct connected to engine; four-panel switchboard; are regulator; wire, poles, etc. Address Perry Short, Monett.

Electrical Material, etc.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commissioner, Washington, D. C., until August 10 for furnishing

electrical material, including fixtures, fittings, batteries, cable, wire, etc. Blanks and general information relating to Circular No. 526 may be obtained at above office or office of assistant purchasing agents, 24 State street; New York; 55 National Realty Building, New Orleans; 1086 North Point street, San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Engine.—See "Electric Equipment."

Engine and Boiler.—Vaughan-Cunningham Tobacco Co., Lexington, Ky., will buy engine and boiler.

Engines.—G. T. & W. J. Flynn, 111 North Water St., Wilmington, N. C., want prices on two new or second-hand engines; 10x48, 12x48 or 9x48.

Engines.—Roanoke Column & Lumber Co., 407 Terry Bldg., Roanoke, Va., wants 50-horse-power and 15-horse-power engines; new or second-hand.

Excavating and Grubbing.—Board of Commissioners, Galveston Drainage System, Capt. B. E. Johnson, secretary, Arcadia, Texas, will receive bids in duplicate until August 30 for excavating 450,000 cubic yards of material and clearing and grubbing 67 acres of bayou timber; R. W. Luttrell, engineer, Galveston, Texas.

Fire Protection.—See "Water-works."

Flue Cleaner.—Dr. W. F. Austin, chairman Board of Public Works, Seneca, S. C., wants steam flue cleaner for electric-light plant.

Hardware.—See "Building Novelties, etc."

Heaters.—Peacock's Iron Works, Selma, Ala., wants second-hand heater for 150-horse-power stationary tubular boiler. (Address in previous notice incorrect.)

Heating.—A. M. Gooch, clerk Board of Education, Hartsborne, Okla., will receive bids until August 10 for heating school; certified check for \$200; plans and specifications on file with clerk or at office of Smith & Parr, architects, McAlester, Okla.

Heating and Ventilating Apparatus.—Department of Justice, Office Superintendent Prisons, Washington, D. C. Sealed proposals will be received at this office until August 16 for furnishing and installing at United States Penitentiary, Atlanta, Ga., heating and ventilating apparatus for hospital building, in accordance with specifications. Copies of specifications, together with further information, on application at Washington office. R. V. LaDow, superintendent of prisons, Washington, D. C.

Heating Apparatus.—See "Government and State Buildings" under Paris, Ky.

Heating Plant.—See "Government and State Buildings" under Corsicana, Texas.

Heating Plant.—Rev. W. L. Hamblin, 1107 23d St., Tuscaloosa, Ala., wants prices on hot-air heating plant for \$8000 edifice.

Heating Plant.—See "Government and State Buildings" under Gainesville, Fla.

Heating Plant.—Jesse Green, Chief Commissioner, Alken, S. C., will open bids August 6 for heating plant and repairs to courthouse; plans and specifications may be seen at Commissioner's office on Mondays, Tuesdays and Saturdays until August 7, when contract will be awarded.

Heating Plants.—City of Mayfield, Ky., Prof. A. C. Burton, superintendent, is receiving proposals for steam-heating plants for three \$18,000 school buildings and old college building; plans, etc., by R. H. Hunt, James Bldg., Chattanooga, Tenn.

Hoisting Engine.—Morrison Machinery & Supply Co., Richmond, Va., wants second-hand 10 and 15-horse-power double-cylinder single-friction-drum hoisting engine.

Hoisting Engine.—R. L. Beasley, Dothan, Ala., wants 20-horse-power double-cylinder hoisting engine with boiler to resist strain of 100,000 pounds of stump-pulling.

Ice Machine.—G. T. Heard, Brooksville, Miss., wants second-hand 10 to 15-ton ice machine.

Ice Plant.—Thos. Field, 255 Main St., Dallas, Texas, wants prices on 10 to 15-ton ice machine and data on manufacture.

Iron.—Frye & Sparger, Box 363, Durant, Okla., want prices on iron for \$13,500 school building.

Irrigation Machinery.—D. E. Piper, 29 Garnett St., Atlanta, Ga., wants plant to irrigate from 15 to 30 acres; to pump water from lake and lift 10 feet.

Labels.—See "Cans, etc."

Levee Construction.—Bids will be received at office of Levee District No. 1, Yell county, at Dardanelle, Ark., until August 16 for construction of 35,000 cubic yards of levee embankment, reinforced concrete lock and dam, and 10 reinforced culverts, varying in length from 50 to 100 feet. Separate bids will be received on earthwork and concrete work; certified check for 10 per cent. of bid; blanks furnished upon application to secretary. For detailed information address Thomas Boies, chief engineer, Fort Smith, Ark., or secretary Levee District No. 1, Dardanelle, Ark.; J. A. Croom, president.

Locomotives.—See "Mining Machinery."

Machine Tools.—Nilson Yacht Building Co., Ferry Bar, Baltimore, Md., wants catalogues and prices on machine-shop tools.

Machinery.—H. E. Hollister, 122 East 25th St., New York, wants catalogues on all types of machinery of interest to engineers.

Machine Tools, etc.—McMillan Pump, Power & Manufacturing Co., Wm. McMillan, Kansas City, Kans., will open proposals September 15 for lathe, 12-inch swing, 8-foot bed; lathe, 30-inch swing, 8-foot bed; planers; drill presses; emery wheels; boring machine for iron, and complete outfit for pattern work.

Machines.—R. C. Helms, Dothan, Ala., wants to correspond relative to placing order for manufacture of machine to dress mill racks; principally casting.

Metal Ceiling.—Rev. W. L. Hamblin, 1107 23d St., Tuscaloosa, Ala., wants prices on metal ceiling.

Metal Lath.—Frye & Sparger, Box 363, Durant, Okla., want prices on metal lath for \$13,500 school building.

Metallic Tile.—Taylor & Mount, Lubbock, Texas, want prices on metallic tile.

Mill Work.—Taylor & Mount, Lubbock, Texas, want prices on mill work for \$25,000 school building.

Mill Work.—Frye & Sparger, Box 363, Durant, Okla., want prices on mill work for \$13,500 school building.

Mining Machinery.—Winding Gulf Colliery Co., 1503 Union Trust Bldg., Cincinnati, Ohio, will buy mine cars (probably of steel construction), electric locomotives, mining machines, etc., for coal-mining plant near Abney, W. Va.

Motor Truck.—Sneed Bros., Pronto, Ala., want to buy light and serviceable automobile for hauling fruits and vegetables.

Office Fixtures, etc.—Street & Sanders, Lock Box 144, Seneca, S. C., want office fixtures and supplies.

Paper Bags.—M. L. Long & Sons, R. No. 1, Glasgow, Va., want names of manufacturers of paper flour bags.

Patternmaking.—See "Machine Tools, etc."

Paving.—A. J. Hawkins, City Engineer, North Birmingham, Ala., will open bids July 27 for grading, macadamizing, laying of concrete sidewalks and gutters, granite curbs and drains on 24th and 26th streets and Nineteenth and Twentieth avenues; storm-water sewer beginning at city limits and ending at Village Creek and Twenty-third avenue; same to be constructed of brick or reinforced concrete pipe and terra-cotta pipe; certified check \$250; full particulars, plans and specifications on file at engineer's office, City Hall, North Birmingham. (Date postponed from July 10.)

Paving.—Street Committee, E. B. Hawks and S. T. Montague, chairmen, Portsmouth, Va., will receive bids until August 5 at office of City Clerk for furnishing tools, labor and materials required in constructing 435 square yards concrete sidewalks and 1100 square yards granite-block gutters on certain streets in West Park View, in Fifth ward; plans and specifications at office of Bascom Sykes, City Engineer; bids for pavements to be made at cost per square yard, including materials and labor, and be on blank form obtained at office of City Engineer; each bid on concrete pavement to be accompanied by certified check for \$50 and on granite block gutter by certified check for \$200, payable to George A. Tabb, City Treasurer.

Paving.—Bids will be received at office of Capt. W. W. Whiteside, Constructing Quartermaster, Fort Myer, Va., until August 13 for paving main passageways with vitrified brick, and concrete as an alternative, in four cavalry stables; certified check, 10 per cent. of bid; plans and specifications on application accompanied by deposit of \$5.

Paving.—Baltimore (Md.) Board of Awards will open bids August 4 to grade, curb and pave with vitrified paving blocks Stag alley from Marion to Lexington street; specifications and proposal sheets furnished on application to Department of Public Improve-

ments, Subdepartment of City Engineer B. T. Fendall.

Paving.—Bids will be received at office of City Clerk, West Blocton, Ala., until July 30 for certain grading, curbing, macadamizing and brick gutters. Plans, specifications and proposal forms may be obtained at office of City Clerk or of Totten & Ohi, City Engineers, Birmingham, Ala.; certified check, \$150.

Paving.—City of Franklin, La., will open bids August 5 for approximately 65,000 square feet sidewalks and 32,500 square feet brick curbing; John C. Lewis, Mayor.

Paving.—Bids addressed to Mayor and General Council, Atlanta, Ga., will be received at City Clerk's office until August 9 for paving Decatur street, 22,000 square yards, with creosoted wood block on concrete foundation; also for paving Madison avenue with same pavement, 2300 square yards. Bids will be considered separately on each street. Specifications furnished on application to R. M. Clayton, City Engineer.

Paving.—Robert Taft, City Treasurer, Montgomery, Ala., will open bids August 2 for paving roadways on portions of South Lawrence and Mildred streets with brick, asphalt, bitulithic, Blome granitoid or mineral rubber pavement, together with necessary grading, etc., in connection. Also for paving sidewalks on following streets with hexagon tile or Schillinger pavement, together with all necessary granite curbing, grading, sewers and brick walls in connection: Union, South Lawrence, Jefferson and Julia streets; for paving sidewalks with hexagon tile, together with necessary work, on Stevenson street and East Jefferson Davis avenue; for improving Clitherall street by grading, curbing, gutters, storm-water sewers, etc. All work in accordance with details, drawings, plans, specifications and surveys on file in office of City Engineer A. R. Gilchrist.

Paving.—Commissioners of Street Improvement District No. 1, J. E. Stevenson, secretary, Marianna, Ark., will open bids August 5 for 13,400 square yards vitrified-block paving on five-inch concrete base, 4000 linear feet concrete curb, etc.; plans and specifications on file at offices of Mr. Stevenson and of Ben C. McGehee, engineer, Little Rock, Ark.

Paving.—J. G. Sutton, City Secretary, Beaumont, Texas, will open bids August 3 for furnishing material and labor for paving gaps in present paving on College, Austin, Park and Pearl streets, aggregating 4120 square yards vitrified brick paving and 2573 linear feet concrete curbing; certified check, \$2000; blank proposal forms furnished by C. L. Scherer, City Engineer; plans and specifications on file at office of City Engineer, and specifications can be obtained on application.

Paving.—Franklin, La., will receive bids until August 5 for construction of 65,000 square feet cement sidewalks and 35,000 square feet (face measurement) brick curbing. For plans and specifications apply to John C. Lewis, Mayor.

Paving.—Bids will be received at office of Major C. C. Ballou, U. S. Army, Constructing Quartermaster, 427 Custom-house, Baltimore, Md., until August 27 for construction of 15,000 square feet granolithic sidewalks at Fort Howard, Md. Plans and specifications may be seen at office of Chief Quartermaster, Department of the East, Governor's Island, N. Y.; blank forms and full information furnished on application.

Paving, etc.—J. J. Hayes, Mayor, and Board of Aldermen, Vicksburg, Miss., will open bids September 6 for paving Cherry street with asphalt, bitulithic, mineral rubber, granitoid, vitrified brick or creosoted wooden blocks; also separate bids for building storm sewer and laying water main on said street; plans and specifications on application to C. R. Twiss, City Engineer.

Peanut Machinery.—N. S. Sherman Machine and Iron Works, 18-36 East Main St., Oklahoma City, Okla., wants machinery to shell, clean and pick peanuts.

Pipes and Fittings.—See "Sawmill Machinery."

Plumbing.—A. M. Gooch, clerk Board of Education, Hartsborne, Okla., will receive bids until August 10 for plumbing and wiring school; certified check for \$300; plans and specifications on file at office of clerk or of Smith & Parr, architects, McAlester, Okla.

Plumbing and Gaspiping.—See "Government and State Buildings" under Paris, Ky.

Portable Houses.—W. B. McEwen, 276 Chestnut St., Asheville, N. C., wants to correspond with manufacturers of portable houses with view to agency.

Pump.—Morrison Machinery & Supply Co., Richmond, Va., wants second-hand four or six-inch belted centrifugal pump.

Pumps.—T. J. League, Tsingtau, China, wants to arrange for introduction of irrigating pumps to be operated by hand.

Reinforcing.—See "Building Materials."

Road Construction.—Bids will be received at Clerk's office, Henrico Courthouse, Richmond, Va., until August 3 for construction of two miles of macadam on Cary-street road; plans and specifications on file at office of State Highway Commissioner P. St. J. Wilson; further information furnished on application; certified check, \$250.

Road Machinery.—R. L. Beasley, Dothan, Ala., wants road machinery.

Road Roller.—C. A. Bingham, Carlisle, Pa., wants second-hand steam road roller (name erroneously printed "Brigham" lately).

Rolling Partitions.—Jopling Bros., Wharton, Texas, want prices on wood rolling partitions.

Roofing.—M. T. Murphree, Monticello Compress & Warehouse Co., Monticello, Miss., wants prices on roofing.

Safe, etc.—Dacula Banking Co., A. M. Wilson, president, Dacula, Ga., wants prices on safe, vault and bank fixtures.

Safe, etc.—Farmers' State Guaranty Bank, J. S. Huston, president, Thomas, Okla., wants prices on safe, vault and bank fixtures.

Safe, etc.—E. Hall, president First State Bank & Trust Co., Bryan, Texas, wants prices on safe, vault and bank fixtures.

Saw.—R. D. Cole Manufacturing Co., Newnan, Ga., wants cold saw for cutting angles, beams and channels up to and including 12 inches.

Sawmill Machinery, etc.—Roanoke Column & Lumber Co., 407 Terry Bldg., Roanoke, Va., wants one 3-foot and one 3½-foot fan; 24x8 or 24x8 four-side planer; jig saw; 18-inch hand jointer; arm sander; power-feed rip-saw; power-feed mitre saw; cross-cut saw; cut-off saw swing; swing heading saw; 56 to 60-inch saw; drykiln pipes and fittings; all new or second-hand.

Sawmills.—Kirby Lumber Co., B. F. Bonner, general manager, Houston, Texas, will be in market for complete plant, including circular and band mill, planer, drykilns, etc.; cost probably several hundred thousand dollars.

Screens.—C. W. Lyon, care of Kansas City Brick & Stone Co., Scarriff Bldg., Kansas City, Mo., wants one 10-foot-long revolving screen with 1½-inch perforations, and one 48 inches by 20 feet long; perforations of first sheet to be 1½ inches, second sheet 1 inch, third sheet ¾ inch, with dust screen outside.

Seating.—T. L. Lightfoot, Cloverport, Ky., wants seating for \$3000 addition to school building.

Sewer Construction.—Sealed proposals for construction of sewer known as section "B" of western interceptor, contract No. 49 of comprehensive system of sewerage, city of Louisville, Ky., will be received at office of Commissioners of Sewerage until August 6; work will consist mainly of building unreinforced concrete sewer three feet six inches and five feet in diameter, length about 4000 feet, 12 to 25 feet deep, including 1875 cubic yards concrete; plans and specifications at office of commissioners and at office of Harrison P. Eddy, consulting engineer, 14 Beacon St., Boston, Mass. Each bid must be accompanied by certified check for at least 7 per cent. of total amount of bid, or a "bidder's bond," as described in proposal form. W. C. Nones, chairman; Chas. P. Weaver, secretary-treasurer; J. B. F. Breed, chief engineer.

Sewer Construction.—See Paving, etc.

Skidding Machine.—J. H. Macleary, Suffolk, Va., in market for skidding machine; second-hand, with cylinders 7 or 7½x10 inches; name dealers' price and where located.

Slate.—Piland & Davis, Newport News, Va., want prices on slate (Buckingham preferred.)

Slate Blackboards.—J. F. Barbour & Co., Roanoke, Va., want prices on slate blackboards.

Steam Hammer.—Chas. T. Lehman, 1923 Powell Ave., Birmingham, Ala., wants 300 to 600-pound steam hammer; state make, condition, etc.

Steel Ceiling.—G. L. Boley, Abilene, Texas, wants prices on 65 or 70 squares steel ceiling.

Steel Flooring.—The undersigned will receive bids for flooring cells in old portion of parish jail at Tallulah, La.; specifications on file with secretary, and will be shown on application; successful bidder to make deposit or give bond for faithful discharge of contract. Bids will be opened by Jail Board on or before September 1; A. L. Slack, secretary.

Store Fixtures.—I. H. Lutterloh, Sanford, N. C., wants prices on drug-store fixtures.

Tin-box Machinery.—J. V. Reed & Co., Station F, Louisville, Ky., want catalogues and prices on machinery to make oval, round, oblong or square talcum powder boxes, etc.

Tub Machinery.—Dare Lumber Co., Elizabeth City, N. C., wants names of manufacturers of tub machinery.

Water Softeners.—See "Government and State Buildings," under Corsicana, Texas.

Water-works.—M. T. Murphree, Monticello Compress & Warehouse Co., Monticello, Miss., wants prices on water tanks and pumps for fire protection.

Water-works.—See "Paving, etc."

Water-works.—Johnston County Commissioners, Sam T. Honeycutt, clerk, Smithfield, N. C., invite bids until September 6 for construction of water-works for courthouse and jail; plans and specifications on file in office Register Deeds, Smithfield. For further information address Mr. Honeycutt.

Water-works.—Lexington, Tenn., contemplates installation of water-works and electric-light plant and wants to correspond with consulting engineer representing machinery company who will submit estimate; cost not to exceed \$15,000. Address H. E. Graper.

INDUSTRIAL NEWS OF INTEREST

Contract for Power Plant.

The G. & W. Manufacturing Co., 26 Cortlandt St., New York, submitted the lowest bid to the Navy Department on July 20 for power-plant work at the Naval Training Station, Newport, R. I. The amount of the bid was \$11,630.

Quannah Wants Distributing House.

The citizens of Quannah are desirous of securing a distributing house for the sale of vehicles, agricultural implements, wagons, luggies, gasoline engines, etc. There are several inducements the city offers. Address the Chamber of Commerce, Porter A. Whaley, secretary, Quannah, Texas.

A Big Ditch Contract.

The Commissioners of Drainage District No. 1, Bancroft, Neb., have awarded contract for the construction of nine miles of ditch to G. A. McWilliams of Walnut, Ill. This ditch will drain about 10,000 acres of land in the Logan River Valley and will cost \$22,000.

The Gallivan Building Co.

The Gallivan Building Co. of Greenville, S. C., is prepared to undertake contracts for the construction of buildings throughout the South, and has erected many of the cotton-mill buildings in that section. J. F. Gallivan is president of the company, which was formerly the J. F. Gallivan Building Co.

Charleston Water-Front Property.

Among the Charleston water-front properties for sale is a 170-foot wharf site in the heart of the city and railroad facilities, also a factory or mercantile site comprising one-half of a city block. Triest & Israel, 43 Broad St., Charleston, S. C., will furnish full details.

Textile Machinery Offered.

Textile manufacturers who may need additional equipment are invited to investigate a lot of textile machinery offered by the Thompson Manufacturing Co. This company has for sale singeing machinery, repeaters, card lacers, Jacquard machines, etc. It can be addressed at Indiana avenue and A street, Philadelphia, Pa.

For Axle Lighting Equipments.

The Atchison, Topeka & Santa Fe Railroad has recently placed an order covering 116 axle lighting equipments for their cars. The order includes 1356 storage-battery cells manufactured by the Electric Storage Battery Co. of Philadelphia. The Santa Fe uses the "chloride accumulator" exclusively on its car-lighting equipments.

A Guatemala Timber Concession.

A 10-year timber concession in Guatemala is offered to purchasers for investment or development. It controls 1200 square miles and the land is traversed by four navigable rivers. Twelve miles of portable sawmill railroad brings the timber from any point to one of these rivers. Address Atwood Violet & Co., 20 Broad St., New York, for particulars.

Contract for Bank Fixtures.

The Lebanon National Bank of Lebanon, Tenn., has awarded a contract for improvements in its offices. This contract includes screening, wainscoting, desks, new fixtures, etc., and was awarded to the Edgefield & Nashville Manufacturing Co., Nashville.

Water-works.—F. M. Houser, Mayor, Perry, Ga., will open bids August 18 for furnishing machinery and materials and constructing water-supply system; plans, details and specifications on file with City Clerk, Perry, and at office of consulting engineers, Hazlehurst & Anderson, Candler Bldg., Atlanta, Ga.

Water-works, etc.—W. T. Quarles, chairman committee on light and water, 514 Fifth avenue, Highland Park (P. O. Richmond), Va., invites proposals until July 31 for preparing plans and specifications for electric-light and water-works systems. For further information apply to Mr. Quarles.

Well Drilling.—Chris & George Hagelstein, Quannah, Texas, want bids on drilling 5000-foot well.

Wiring.—See "Plumbing."

Woodworking Machinery.—See "Tub Machinery."

Woodworking Machinery.—W. A. Parker, Boston, Ga., wants band resaw and molding and flooring machines.

Woodworking Machinery.—Nilson Yacht Building Co., Ferry Bar, Baltimore, Md., wants catalogues and prices on woodworking machinery.

Tenn. The company named manufactures furniture, desks, counters, hardwood mantels, church pews, bank fixtures, etc., and has a large modern plant.

Factory and Power Site.

A factory and power site located on the Baltimore & Ohio Railroad and with a switch to the Chesapeake & Ohio Railway is offered for sale. It includes a developed water-power furnishing 60 horse-power and five and one-half acres of land, said to be valuable for any class of manufacturing industry. Particulars can be obtained by addressing Tannehill & Ralston, Staunton, Va.

Offers Box and Veneer Plant.

A complete box and veneer plant at Raleigh is offered for sale. It comprises buildings, machinery, power equipment, etc., for manufacturing tobacco caddies, shipping cases, veneer and other wood products. The plant is said to offer an exceptional opportunity for some manufacturer desirous of acquiring a Southern plant in a desirable section. B. M. Parker, West Raleigh, N. C., can furnish full details.

Asphalt and Townsite Propositions.

Capitalists who may be in position to consider asphalt and townsites propositions in Oklahoma are invited to address W. P. Poland at Ardmore, Okla. He offers a 500-acre townsites located within half a mile of a progressive city of 12,000 inhabitants, and rock-asphalt beds for development and the sale of the product for paving purposes. It is understood these two properties and several others for sale by Mr. Poland offer excellent opportunities for investment or development.

Welman Pump Manufacturing Co.

Succeeding the Welman Machine Works of Columbus, Ohio, the Welman Pump Manufacturing Co. has incorporated and established its offices and factory at 274 Spruce street, Columbus. Its building is 50x150 feet, with space for an extension, the offices being located on the first floor and the drafting-rooms and pattern shop on the second. This company manufactures pumps of various designs, which have been favorably introduced, and is installing new equipment for the improvement of its facilities.

B. F. Sturtevant Co. Reorganized.

The B. F. Sturtevant Company has been reorganized and recapitalized. The new corporation is organized with \$1,250,000 6 per cent., cumulative preferred stock and \$1,250,000 of common stock, and the stock has all been taken by a few of the large owners. John Carr, chairman of the board of directors of the First National Bank, is president; Eugene N. Foss is treasurer, and E. B. Freeman is general manager. This increased capitalization represents capital expenditures during the past year, largely in the erection of a new plant in Hyde Park, Boston, Mass., which cost over \$1,500,000. The B. F. Sturtevant Company has been transacting a business of about \$3,000,000 a year.

C. & G. Cooper Gas Engines.

The C. & G. Cooper Company, Mt. Vernon, Ohio, has developed and is now building a line of large gas engines of the horizontal double-acting twin-tandem four-cycle type, in addition to its well-established Corliss steam engines. The new engines are being built in sizes ranging from 400 to 5000 brake horse-

power, and are especially adapted to the use of blast-furnace and waste gases. Several distinctive features of construction have been developed with the idea of simplicity, accessibility and uniformity in all parts, and the ability to make long runs and give continuous reliable service. A recent sale by the company was of a gas-engine-driven gas compressor to the Wheeling Natural Gas Co., Pittsburgh, Pa., to be installed in one of the company's pumping stations near Wheeling, W. Va. This engine is to be the horizontal twin-tandem double-acting type, driving gas compressors for the long-distance transmission of natural gas.

Charlotte Company's Asbestos-Magnesia.

The Carolina Asbestos Manufacturing Co., Charlotte, N. C., calls especial attention to its asbestos magnesia. This covering is composed of carbonate of magnesia, pure asbestos and other fireproofing materials compounded in the most approved way, which renders it a most durable pipe covering. It is made in sections three feet long, covered with a heavy canvas jacket and furnished complete with the necessary brass bands to hold it securely in place on the pipe. Where great strength and durability are required, together with best results in steam saving, this covering is in demand. The company also offers asbestos cement, composed of asbestos fiber and adhesive non-conducting materials, for covering boilers, fittings and irregular surfaces, put up in dry form in bags of 100 pounds each. This asbestos cement sticks easily and can be easily applied by mixing with water and applying with a trowel or paddle.

Recent Ice Machinery Sales.

There has been an increasing demand for ice and refrigerating machinery during recent months, and a considerable portion of the contracts have been secured by the York Manufacturing Co., York, Pa. This company's sales from March 24 to July 26 included about 40 large contracts for ice plants ranging in capacity from 10 to 30 tons and for refrigerating plants of capacities from 4 to 40 tons, besides compression sides of various capacities up to 90 tons, etc. The machinery was shipped to various classes of industries throughout the country, including the following: Forty-ton refrigerating plant to Rochester, N. Y.; 10-ton refrigerating plant to Allegheny, Pa.; 10-ton refrigerating plant to Uvalde, Texas; 30-ton ice plant to a brewing company at New Britain, Conn.; 10-ton refrigerating plant to East Webster, Mass.; 80-ton compression side to a Springfield (Mass.) company; 30-ton compression side to a Texas cotton-oil company, etc.

TRADE LITERATURE.

Jeanesville Centrifugal Pumps.

Bulletin No. 20, illustrating and describing the Jeanesville centrifugal pumps, has been issued by the Jeanesville Iron Works Co. of Hazleton, Pa. This company manufactures the products referred to, and has recently received orders for 10 18-28x48x9½x36-inch triple-expansion pumps, one 15-24x40x15x24-inch triple-expansion pump, one 9½-16x26x9½x18-inch triple-expansion pump, two 9-14x14x8½x18-inch triple-expansion pumps, a number of horizontal and vertical power pumps and numerous medium-size mine pumps.

Timely Belting Information.

Users of belting for transmission purposes will be interested in "The Phoenix," a monthly magazine issued by the New York Leather Belting Co. of 51 Beekman St., New York. The publication considers technical discussions, with illustrated descriptions of transmission problems, and shows comparative tests of the efficiency of various types of belting for different classes of machinery. Among the subjects discussed in recent issues of the magazine is that relating to transmission conditions in Southern mills. Copies of the publication may be obtained upon application to the company.

Berger Steel Office Furniture.

Steel equipment for offices is in increasing demand because of its many merits. It comprises filing devices, cabinets, vault omnibuses, transfer boxes, waste-paper baskets, tables, etc. One of the foremost manufacturers of this class of articles is the Berger Manufacturing Co., now distributing its descriptive catalogue, which contains many photographic views of Berger products. Berger steel office furniture is complete and adaptable to a wide range of varying requirements, embodying features that ensure serviceability, convenience, durability, neatness of design, etc. It has been chosen by exacting purchasers throughout the country, and in numerous important offices in the

manufacturing and mercantile world can be seen Berger specialties meeting the needs of progressive people. The company's main offices and plant are at Canton, Ohio.

Electric Drive for Printing Presses.

The General Electric Bulletin No. 4672 tells of the advantages of the electric drive as compared with the mechanical drive for large printing presses. It contains a description and illustration of a plant equipped by the General Electric Co. of Schenectady, N. Y., which has developed a line of motors provided with special controlling devices designed for the operation of large printing presses. A notable feature of the equipment is a multiple push-button speed-control system, which ensures the safety of the press operator and gives positive control of the press at all speeds. The bulletin illustrations show details of equipment and actual installations.

A Pump for Suburban Homes.

The Gould's Pyramid pump is offered especially as a means of providing water supply on country estates and in suburban homes. It will ensure plenty of water under a satisfactory pressure for the bathroom, kitchen or any part of the premises, and gives satisfaction not only for general service, but for fire protection also. This pump is a medium-price power pump with a reputation. It is built in the best possible manner and will withstand the hardest kind of service for years when operated by gas, gasoline engine or other belt power. The Gould Manufacturing Co., Seneca Falls, N. Y., manufactures the Pyramid pump and is distributing literature describing it.

The Lea Turbine Pump.

Those who are interested in high-duty turbine pumping machinery suitable for all classes of service should not fail to investigate the Lea high-duty turbine pump. The Lea high-duty turbine and volute pumps are suitable for practically all classes of service—water-works, irrigation, reclamation, fire service, mine drainage, boiler feed, sugar mills, etc. The Lea pump is constructed from Swiss designs which have been Americanized in order to conform to American practice. It is described and illustrated in Bulletin II, which the manufacturer is distributing. The manufacturer is the Lea Equipment Co., 99 West St., New York, which is prepared to send full details of its machinery to inquirers.

A CORRECTION.

Heating Plant.—Bids addressed to M. Brady, secretary School Board, Texarkana, Texas, will be received until August 10, 1909, for heating, plumbing and wiring proposed high school; plans and specifications on file with Sanguinet & Staats, architects, Fort Worth, Texas, and at office of the board, Texarkana; certified check for 3 per cent. amount of bid, payable to A. S. Watlington, president School Board. Erroneously stated in a previous issue that bids would be received only until July 26.

Bank Buys Trust Company.

A letter from Spartanburg, S. C., to the MANUFACTURERS' RECORD says that the First National Bank of Spartanburg has bought the entire stock of the Fidelity Loan & Trust Co. of that city at \$294 per share. The company was organized in 1887, and has always had a very prosperous business. The First National Bank has a capital of \$500,000, a very large business, and in its directorate millions of dollars are represented. The officers are W. E. Burnett, president; John B. Cleveland, vice-president; A. M. Chreitzberg, cashier, and S. B. Jones, assistant cashier.

It is estimated that 2000 carloads of Georgia peaches brought this year \$1,000,000, against \$975,000 which 6000 carloads brought last year. The fine financial showing this year in spite of crop conditions is credited to the work done by the Georgia Fruit Exchange in marketing the crop systematically.

Douglas Robinson of New York, who has for some years been interested in about 30,000 acres of timber and cleared mountain lands in Washington and Grayson counties, Virginia, is, according to a dispatch from Bristol, spending between \$40,000 and \$50,000 in establishing upon the tract a fruit and vegetable farm.

MORE NATURAL GAS.

Larger Volume of Industrial Fuel for West Virginia Capital.

[Special Cor. Manufacturers' Record.]

Charleston, W. Va., July 24.

This city seems just now to have everything coming her way, and unless all signs fail is on the eve of an era of unexampled progress and prosperity. For a number of years it has been known that the output of a great gas field was more easily accessible to Charleston than to any other city, and that the problem of the cheapest and best fuel had been solved for many years to come, but even the most optimistic Charlestonian failed to know to what an extent this great blessing is to be enjoyed. Within the last few days it has become generally known—knowledge of the fact having been locked in the bosoms of a small and favored group up to that time—that a new gas field had been found, or that the old one was much larger than had been known hitherto.

The Weir interests, engaged in mining a rich vein of cannel coal on Falling Rock creek, in the northeastern part of this (Kanawha) county, have had drilled upon their property five wells, each of which has proved a gas producer, the combined capacity being in the neighborhood of 10,000,000 cubic feet a day. This production is some 10 miles east of the Roane county field, whence the city's supply now comes, and makes the assurance of a supply to last for many years doubly sure. The new field lies something like 15 miles from the city in a northeasterly direction. Nor is that all the good news in the matter of gas. On Mill Creek, which lies between the city and the Falling Rock field, a large gasser was struck this week, thus demonstrating the fact that the field extends this way, and it is now believed by many well-informed gas men that Charleston lies right in the center of it, and that sooner or later the city's gas supply will come from the ground right beneath her feet, as it were. The Mill Creek well is good for 2,000,000 feet daily, and is the property of the United Fuel Gas Co. It is about seven miles from the city as the crow flies or the pipe line runs. And between this place and that, on Two-mile Creek, about three and a half miles from the city, a well was drilled for oil in 1879 and a considerable flow of gas developed. The well was left open and the gas escaped at will for a good many years. Sometimes it would be set afire, and for weeks, possibly months, at a time would light up the woods for miles around at night.

But the new development on Falling Rock is not confined to gas. Each of the five wells put down by the Weirs is an oil well also, and it is believed by the experts that a new oil field has thus been discovered. The managers of this enterprise have kept their own counsel as they have progressed with their wells, and have closed them in as completed, without letting the outside world know what they had discovered. Each well produced a good flow of gas and a considerable amount of oil, but nothing big in the latter commodity. A few days ago the well showing the least of both gas and oil was "shot," and from that time on has been producing oil, being considered good for 10 barrels a day. It is believed that this well is on the edge of the pool, and that all the others will prove to be much better after having been treated to a dose of nitroglycerin in a state of active eruption. This production is found in the "Squaw" sand, which lies just below the "Big Injun," some 1700 feet below the surface of the earth. The sand is very thick, a fact which promises well for a lasting production.

What this may mean nobody, of course, can tell with anything that approaches certainty, but it is believed that a new and rich pool of oil has been brought to light, and those who have been excited heretofore over the prospects of a great oil development with Charleston as the center have been stirred to fever heat, while the most phlegmatic citizens of the town have begun to "sit up and take notice." This production is due east from the Rock Creek field in Roane county about 15 miles.

Eugene Childs and Fred E. Sands, formerly officials of the Tremont Manufacturing Co. of Boston, have been here recently looking over the ground with a view to locating an immense wrench factory. They have been on a deal with the Baldwin Steel Co. for its plant, which has been idle for most of the time during the past two years, owing to the death of the young man who was manager, and on whose behalf the plant was constructed. The new parties have found the plant well adapted to their purposes, and a price has been agreed upon between them and the Baldwin company. The deal will probably be consummated, as it now depends upon certain matters that the Chamber of Commerce has taken in hand, with every promise of being able to close up in a satisfactory manner. The wrench people, if they establish their factory here, will employ 150 men in the beginning, and expect to increase the number rapidly until their payroll will be second to none in the city, except the Kelly axe factory.

Another enterprise to which the Chamber of Commerce is now turning its attention is the construction of a macadamized turnpike from this city to the Roane county oil field. The trade of that field is rich and important, and the city that can furnish it with a good road will corral the most of it. At present the roads to the field from all outside points are well-nigh impassable, and the hauling of another winter will put them clean out of business. Grant P. Hall, who as a member of the county court last year did more to get the roads of Kanawha county improved than any other man ever did, has been placed at the head of the committee having the matter in charge, and it is expected that he will be able to get the present county court to take the matter up at once. The construction of such a road would mean many hundreds of thousands of dollars in trade to the merchants of this city.

Mr. John A. Coyle, who has been managing the Baldwin Steel Co.'s plant here for some time, and who has had excellent opportunities for studying conditions in and around Charleston, sizes up the city, its resources and prospects in an interview as follows:

"Without disparaging the growth and success of Pittsburg in the least, it can be said that Pittsburg is more or less of an accident, but it is hoped that the success of this city will be due to the foresight of her citizens and systematic development. Geographically we do not have to concede a point to any rival. While we do not have as many railways as some, we have one stream which is ample to take care of any number of industries which may be established. So far as acreage is concerned, with sites for business districts, factories and mills, with the outlying districts for residences, there can be no limit to the expansion of Charleston.

"One can readily recognize the probability of Charleston's becoming a large steel-manufacturing center; can easily look forward and suppose that in a few years it will be entitled to the name 'Pittsburg of the South.' This because our facilities are cheapest and best. The supply

of fuel is the most potent factor in the up-building of a steel center, and in this section the supply is practically unlimited. The question of fuel supply is the first to be considered with reference to building a manufacturing center. It was upon this basis that Birmingham and Sheffield were started on their road to development.

"Another consideration is the matter of ore supply. We are located as close to the ore fields as is Pittsburg; better, in fact, if it should be developed that we need ore in great quantities. The Chesapeake & Ohio Railroad connects us with the seaboard, and the rich Cuban ores can be laid at our doors at a not far distant day at a cost that should enable us to become a factor in the manufacture of steel from the steel bar to the finished article.

"Some large concerns have already found it to their advantage to locate here, and the manufacturing industries can be profitably extended by the securing of plants for the manufacture of files, saws, machine tools, agricultural implements and all the other commodities which the ingenuity of the progressive American workman requires. It is said that there are shortly to come to Charleston a plant containing three open-hearth furnaces, a short bar mill, sheet finishing mill and probably a big saw factory. And I am sure this number will be greatly enlarged when manufacturers now operating in congested districts, largely lacking in the advantages which Charleston possesses to such an eminent degree, learn of the good things to be found here.

"What better locality could manufacturers desire than one situated on three railroads, with fair prospects for others; on a river navigable the year round; in a district where natural gas is 60 per cent. cheaper than in other localities; in an enormous coal field, where development has only just begun, and at a saving on one-third the cost of the Pennsylvania field, and right in the heart of a new, rapidly developing oil field?

"These natural advantages, possessed in such a large degree, should result in a rapid yet systematic growth by Charleston in the immediate future."

The circuit court of Kanawha county has, in the language of the small boy, "knocked the tar" out of the two-cent fare law enacted by the Legislature at its session in 1907. The Coal & Coke Railroad, belonging to ex-Senator Henry G. Davis, Senator Stephen B. Elkins and their immediate family and friends, was the first to move against the law. It did so on the ground that it was confiscatory, in that it compelled the road to carry passengers for two cents a mile when it could not afford to do so. Judge Burdette agreed with the contention of the attorneys of the road and granted an injunction against the officers of the State to keep them from proceeding to enforce the provisions of the law against the railroad.

The Chesapeake & Ohio then sought to have the law declared void, claiming that it was discriminatory, because it excepted from its provisions roads less than 50 miles in length, except where such roads were owned or operated by roads of more than 50 miles' length. The court held that the law, thus discriminating against roads of the same class but of different ownership, was unconstitutional. The State's officers were therefore enjoined from putting the law in effect with respect to the Chesapeake & Ohio.

Then the Virginian sought relief of the same kind, and only a few days ago Judge Burdette granted the injunction prayed for, and the Virginian is now charging three cents a mile.

The Legislature will doubtless take another turn at the matter when it meets again.

GEO. BYRNE.

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Capital, \$1,500,000
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Accounts of Banks, Bankers, Corporations and Individuals solicited. We invite correspondence.

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We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.
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Acts as Executor, Administrator, Trustee, Receiver for Firms, Individuals or Corporations.

Receives Deposits subject to Check, and allows Liberal Rates of Interest thereon.

Bank of Richmond

Capital and Surplus, \$1,500,000

RICHMOND, VA.

JOHN SKELTON WILLIAMS, President.
FRED'K E. NOLTING, 1st Vice-President.
T. K. SANDS, 2d Vice-President and Cashier.
H. A. WILLIAMS, Assistant Cashier.
L. D. CRENSHAW, Jr., Trust Officer.

In aiding the development of legitimate business enterprises, this bank believes that it performs a required duty, and to this end offers the services of a live, progressive bank, conservatively managed.

We Make a Specialty of Buying Southern Municipal Bonds

WE PAY THE HIGHEST MARKET PRICES
Correspondence Solicited.

A. J. HOOD & CO.

Penobscot Bldg. DETROIT, MICH

MANUFACTURERS and JOBBERS

Frequently find it necessary to have BANKING FACILITIES in addition to those offered by local banks.

FIRST NATIONAL BANK OF RICHMOND, VA.

With assets of nine million dollars, offers just the additional facilities required.

Jno. B. Purcell, President.
Jno. M. Miller, Jr., Vice-Pres. and Cashier.

JOHN W. DICKEY

SOUTHERN SECURITIES

AUGUSTA, GEORGIA

The Delaware Fidelity Trust Co.

Home Office—Dover, Delaware

Is especially interested in the development of the South and will assist substantial enterprises requiring additional capital.

Announces the opening of a branch office in the city of Philadelphia, where arrangements may be made for the organization and consolidation of corporations, registration of stock, and for acting as trustee in bond issues.

Correspondence solicited.

THE DELAWARE FIDELITY TRUST CO.

1415 Arch Street, Philadelphia, Pa.

The National Exchange Bank

OF BALTIMORE, MD.

Hopkins Place, German and Liberty Sts.

Capital, \$1,000,000

July 15, 1908, Surplus and Profits, \$671,631.60

OFFICERS:

WALDO NEWCOMB, President.
SUMMERFIELD BALDWIN, Vice-Pres.
R. VINTON LAMSDALE, Cashier.
WM. J. DELCOUR, Asst. Cashier.
O. G. MORGAN, Asst. Cashier.
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals Invited.

SOUTHERN SECURITIES

We own and offer high-grade investments, among which are:

6% COUPON NOTES NEW ORLEANS RAILWAY & LIGHT CO.
5% ALIMONY CERTIFICATES OF INDEBTEDNESS OF NEW ORLEANS

WRITE FOR PARTICULARS

Interstate Trust & Banking Co.

NEW ORLEANS

Capital and Surplus Over \$1,000,000

CROSS CREEK COAL COMPANY 6% Gold bonds, total issue \$250,000. All have been disposed of to investors and bankers in different parts of the country, including Saco, Maine; Boston, Mass.; Rochester, N. Y.; Westfield, Olean, Fredonia and Buffalo, N. Y.; Franklin, Coudersport, Pittsburgh, Smithport, Shamokin and Port Allegany, Pa.; Columbus, Dayton and Springfield, Ohio; Northfork, Welch and Bluefield, W. Va.; Roanoke, Va.; Nashville, Knoxville, Jasper, Chattanooga and South Pittsburg, Tenn.; Atlanta, Ga.; Lowell, Mass.; East Orange, N. J., and Washington, D. C., until now there are but \$20,000 of them left. These bonds are first lien on 7000 acres of the best coal properties in Tennessee, and \$75,000 of this money is being spent on an up-to-date coal works with a capacity of about 1000 tons a day. Particulars will be furnished from the office, 1005 Mutual Life Building, Buffalo, N. Y. P. S.—A bonus of preferred stock will be given with the bonds.

GO SOUTH

Business Opportunities, Investment Securities, Real Estate, Timber, Mines, Industrial Properties and Mortgages in Southern States and Mexico, correspond with

SOUTHERN STATES DEVELOPMENT CO.
GEO. B. EDWARDS, President, New York, N. Y.
Office, Tribune Bldg., Park Row and Nassau St.
Connections in the Principal Cities of Europe.

SURETY BONDS**Fidelity & Deposit Co.**

OF MARYLAND

Home Office, - BALTIMORE, MD

Assets Over \$5,000,000

Pioneer Surety Co. of the South.
Becomes Surety on bonds of every description.

AGENTS IN ALL PRINCIPAL CITIES.

HARRY NICODEMUS, EDWIN WARFIELD,
Sec'y and Treas. President.

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Recent government tests show

"AMERICAN" PURE MANILA ROPE to be from 10% to 25% stronger than the standards set by the United States Government for manila ropes of various sizes.



"AMERICAN" ROPE is most economical because it gives the longest service and the greatest value for the money invested.

Specify "AMERICAN" on your orders and turn rope expense into rope economy.

WRITE for our booklet "ROPE," with samples and prices.

THE AMERICAN MFG. CO.

MANILA . . SISAL . . JUTE CORDAGE

65 WALL STREET

NEW YORK, N. Y.

TRANSMISSION ROPE

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,

Baltimore, Md., July 28.

Business was rather quiet in the Baltimore stock market during the past week. In the trading United Railways common sold at 12½; do. trust certificates, 12½ to 12½; do. incomes, 59 to 58½; do. funding 5s, 85½ to 85½; do. do. scrip, 85½ to 86; United 4s, 88 to 88½; Consolidated Gas, Electric Light & Power 4½s, 85 to 85½; Consolidated Gas 4½s, 96 to 97; Seaboard preferred, 28; Seaboard Company first preferred, 76 to 77; do. second preferred, 37; Seaboard 4s, 90½ to 89½; do. three-year 5s, 99½ to 99½; do. 10-year 5s, 99½ to 100; Consolidated Cotton Duck, 7; Mt. Vernon-Woodberry Cotton Duck 5s, 82 to 81½; G.-B.-S. Brewing 1sts, 45 to 46.

Fidelity & Deposit sold from 155 to 156; Maryland Trust common, 64 to 65; American Bonding, 72 to 70; Maryland Casualty, 100; Mercantile Trust, 145; International Trust, 140; Fidelity Trust, 215.

Other securities were traded in thus: Northern Central Railway stock, 104½ to 104½; Western Maryland, 3½ to 3; Consolidated Coal, 93; Georgia & Alabama Consolidated 5s, 105½; Macon Railway & Light 5s, 96; Norfolk & Portsmouth Traction common, 20½; Atlantic Coast Line of South Carolina 4s, 99; Memphis Street Railway 5s, 98½ to 99; Newport News & Old Point 5s, 95; Western Maryland 4s, 87; Houston Oil common, 7½ to 8½; Georgia, Carolina & Northern 5s, 106 to 105½; Baltimore Traction (North Baltimore division) 5s, 113; Baltimore City Passenger 5s, 101½ to 101½; City & Suburban (Washington) 5s, 104½; Maryland Electric 5s, 96½ to 97½; Baltimore & Harrisburg 1st 5s, 105½; Atlantic Coast Line of Connecticut stock, 297 to 300; Atlantic Coast Line of Connecticut 5-20s, 91; North Carolina 4s, 1910 coupons, 99½; Baltimore City 3½s, 1930, 99½; Atlantic Coast Line new 4s, certificates, 84½ to 85½; Norfolk Railway & Light 5s, 98½ to 98½; Fairmont Coal 5s, 98 to 97½; Norfolk Street Railway 5s, 110; Carolina Central 4s, 95½; Florida Southern 4s, 93; Alabama Consolidated Coal & Iron 5s, 84; Atlantic Coast Line Consolidated 4s, 96; Atlantic Coast Line of Connecticut 4s, certificates, 82.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended July 28, 1909.

Railroad Stocks.	Par.	Bid.	Asked.
Atlanta & Charlotte.....	100	180	180
Atlantic Coast of Conn.....	100	297½	315
Georgia Sou. & Fla.....	100	23	40
Georgia Sou. & Fla. 1st Pfd.....	100	92½	76½
Georgia Sou. & Fla. 2d Pfd.....	100	72½	76½
Seaboard Company Common.....	100	16	18
Seaboard Company 1st Pfd.....	100	75	77
United Rys. & Elec. Co.....	50	12	12½
Western Maryland.....	50	3	3½

Bank Stocks.

Citizens' National Bank.....	10	39	39½
Commonwealth Bank.....	50	88	88
Producers & Mechanics' Bank.....	100	215	215
Farmers & Mer. Nat. Bank.....	40	49½	49½
First National Bank.....	100	135	143
German-American Bank.....	100	101	110
German Bank.....	100	101	110
Maryland National Bank.....	20	21	21
Merchants' National Bank.....	100	168	170
National Bank of Baltimore.....	100	121	124
National Bank of Commerce.....	15	25	28
National Exchange Bank.....	100	158	161
National Howard Bank.....	10	13	13
National Marine Bank.....	30	41	41
National Mechanics' Bank.....	10	28	29
National Union Bank of Md.....	100	122	123
Second National Bank.....	100	143	143
Third National Bank.....	100	145	145

Trust, Fidelity and Casualty Stocks.

American Bonding Co.....	25	70½	72
Baltimore Trust & Guarantee.....	100	290	300
Continental Trust.....	100	216½	218
Fidelity & Deposit.....	50	155	156
Fidelity Trust.....	100	210	215
International Trust.....	100	135	145
Maryland Casualty.....	25	100	110
Maryland Trust.....	100	100	100
Maryland Trust Pfd.....	100	64	65
Mercantile Trust & Deposit.....	50	145	150
Union Trust.....	50	70	70
F. S. Fidelity & Guaranty.....	100	127½	135

Miscellaneous Stocks.

Ala. Con. Coal & Iron.....	100	25	25
Ala. Con. Coal & Iron Pfd.....	100	65	72½
Con. Cotton Duck Common.....	50	6½	7½
Con. Cotton Duck Pfd.....	50	22½	24½
Con. Gas, Elec. Lt. & P. Com.....	100	35	40
Con. Gas, Elec. Lt. & P. Pfd.....	100	87	88
Consolidation Coal.....	100	93	93
G. B. S. Brewing Co.....	100	2½	3½
Georges Creek Coal.....	100	90	95
Mer. & Miners' Trans. Co.....	100	74	74

Railroad Bonds.

Atlanta & Charlotte Ext. 4½s.....	100	100
Atlantic Coast Line 1st 4s, 1952.....	95½	96
Atlantic Coast Line new 4s, Cfs.....	86	86
At. Coast Line Com. 4s, Cfs, 5-20s.....	91	96
Atlan. Coast Line (Conn.) 4s, Cfs.....	82	83½
Balto. & Harrisburg Ext. 5s, 1935.....	104	108½
Carolina Central 4s, 1949.....	95	96
Coal & Iron Railway 5s, 1930.....	102½	102½
Georgia & Alabama 5s, 1943.....	105½	105½
Georgia, Car. & North. 1st 5s, 1929.....	105½	106
Georgia Pacific 1st 6s, 1922.....	115	118
Georgia South. & Fla. 1st 5s, 1945.....	108½	108½
Piedmont & Cum. 1st 5s, 1911.....	100	100
Potomac Valley 1st 5s, 1941.....	108	110
Raleigh & Augusta 1st 6s, 1926.....	112	112
Savannah, Fla. & West. 5s, 1934.....	114	114
Seaboard Air Line 4s, 1960.....	89½	89½
Seaboard Air Line 5s, 10-year, 1911.....	100	100½
Seaboard Air Line 5s, 3-year.....	99½	99½
Seaboard & Roanoke 6s, 1916.....	100	100
Seaboard & Roanoke 5s, 1925.....	108	108
South Bound 5s, 1941.....	106½	108
Southern Ry. Con. 5s, 1944.....	112½	112½
Suffolk & Carolina 5s, 1952.....	97	100
Virginia Midland 5th 5s, 1926.....	100	100
Virginia Midland G. M. 5s.....	109½	111½
Western Maryland 4s, 1952.....	86½	86½
Western Maryland 2d 4s.....	68½	68½
West Va. Cent. 1st 6s, 1911.....	102	102½
W. Va. Col. & Aug. 6s, 1910.....	101½	101½
Wilmington & Wld. Gold 5s, 1935.....	113	113

Street Railway Bonds.

Atlanta Con. St. Ry. 5s.....	105	105½
Augusta Ry. & Elec. 5s, 1940.....	101½	101½
Balto. City Pass. 5s, 1911.....	101½	101½
Balto. City Pass. 4½s.....	101½	101½
Balto., Sp. Pt. & C. 4½s.....	93	96
Balto. Traction 1st 5s, 1929.....	110½	112
Balto. Trac. (N. B. Div.) 5s, 1942.....	113½	115
Central Ry. Con. 5s (Balto.), 1932.....	111	112
Central Ry. Ext. 5s (Balto.), 1932.....	111	112
Charleston City Ry. 5s, 1923.....	103	103
Charleston Con. Elec. 5s, 1909.....	91½	91½
City & Suburban 5s (Balto.), 1922.....	108	108½
City & Suburban 5s (Wash.), 1948.....	105	105
Knoxville Traction 1st 5s, 1928.....	106	107
Lexington Railway 1st 5s, 1949.....	97	97
Macon Ry. & Lt. 1st Con. 5s, 1953.....	95	95
Maryland Electric Railways 5s.....	97	97½
Memphis Street Railway 5s.....	99	99½
Newport News & Old Pt. 5s, 1938.....	93	96
Norfolk & Portsmouth Traction 5s.....	86	87
Norfolk Railway & Light 5s.....	98½	98½
Norfolk St. Ry. 5s, 1944.....	109½	112
United Railways 1st 4s, 1949.....	88½	89
United Railways Inc. 4s, 1949.....	58½	58½
United Railways Funding 5s.....	85½	86

Miscellaneous Bonds.

Ala. Con. Coal & Iron 5s.....	84½	84½
Atlanta Gas 1st 5s, 1947.....	102	102
Baltimore Electric 5s.....	89½	90
Consolidated Gas 5s, 1910.....	101½	101½
Consolidated Gas 5s, 1939.....	111½	113½
Consolidated Gas 4½s.....	96	96½
Consolidated Gas 4½s Cfs, 1913.....	96	97
Con. Gas, Elec. Lt. & P. 4½s.....	85½	85½
Fairmont Coal 5s.....	97	97½
G.-B.-S. Brewing 1st 4s.....	45½	46
B.-B.-S. Brewing Income 4s.....	14	15
Maryland Telephone 5s.....	99	99½
Mt. Vernon-Woodbury C. Duck 5s.....	81½	81½
United Elec. Lt. & P. 4½s.....	92	93½

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending July 26.

	Bid.	Asked.
Abbeville Cotton Mills, S. C.....	75	75
Aiken Mfg. Co. (S. C.).....	85	85
American Spinning Co.....	150	150
Anderson Cotton Mills (S. C.).....	50	58½
Arkwright Mills (S. C.).....	100	100½
Augusta Factory (Ga.).....	65	70
Avondale Mills (Ala.).....	115	125
Belton Mills (S. C.).....	112	121
Bluff Mills Co. (Ga.).....	100	114
Brandon Mills (S. C.).....	120	120
Chadwick-Hoskins Mfg. Co. (N.C.).....	130	130
Chadwick-Hoskins Mfg. Co. (N.C.) Pfd.....	100	100
Chiquola Mfg. Co. (S. C.).....	140	140
Clifton Mfg. Co. (S. C.).....	105	105
Clifton Mfg. Co. (S. C.) Pfd.....	99	101
Clinton Cotton Mills (S. C.).....	102	102
Columbus Mfg. Co. (Ga.).....	97	100
Courtenay Mfg. Co. (S. C.).....	97	105
Dallas Mfg. Co. (Ala.).....	97	105
Darlington Mfg. Co. (S. C.).....	72½	75
Drayton Mills (Ala.).....	100	100
Eagle & Phenix Mills (Ga.).....	135	135
Easley Cotton Mills (S. C.).....	158	162
Enoree Mfg. Co. (S. C.).....	58	65
Enoree Mfg. Co. (S. C.) Pfd.....	92	98
Enterprise Mfg. Co. (Ga.).....	89	90
Exposition Cotton Mills (Ga.).....	72	77
Gadney Mfg. Co. (S. C.).....	72	77
Gainesville Cotton Mills (Ga.).....	55	65
Granby Cot. Mills (S. C.) 1st Pfd.....	50	50
Graniteville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	67½	67½
Grendel Mills (S. C.).....	114	120
Henrietta Mills (N. C.).....	175	175
King Mfg. Co., John P. (Ga.).....	95	100
Lancaster Cotton Mills (S. C.).....	122	146
Lancaster Cotton Mills Pfd.....	95	98
Langley Mfg. Co. (S. C.).....	96	100
Laurens Cotton Mills (S. C.).....	120	135
Limestone Mills (S. C.).....	140	150
Lockhart Mills (S. C.).....	78	90
Lockhart Mills Pfd.....	98	100
Loray Mills (N. C.) Pfd.....	95	97½
Marlboro Cotton Mills (S. C.).....	83	85
Mayo Mills (N. C.).....	165	165
Mills Mfg. Co. (S. C.).....	97	105
Mills Mfg. Co. (S. C.) Pfd.....	97	109
Monaghan Mills (S. C.).....	118	118
Monarch Cotton Mills (S. C.).....	100	110
Newberry Cotton Mills (S. C.).....	120	140
Norris Cotton Mills (S. C.).....	120	121
Olympia Cot. Mills (S. C.) 1st Pfd.....	78	87½
Orangeburg Mfg. Co. (S. C.) 1st Pfd.....	80	88
Orr Cotton Mills (S. C.).....	103½	104½
Pacolet Mfg. Co. (S. C.).....	105	105
Pacolet Mfg. Co. (S. C.) Pfd.....	100	100
Pelzer Mfg. Co. (S. C.).....	150	160
Piedmont Mfg. Co. (S. C.).....	172	175
Poe Manufacturing Co. (S. C.).....	150	155
Richland Cot. Mills (S. C.) 1st Pfd.....	50	50
Raleigh Cotton Mills (N. C.).....	100	105
Roanoke Mills (N. C.).....	160	160
Saxon Mills (S. C.).....	122	130
Sibley Mfg. Co. (Ga.).....	62½	65
Spartan Mills (S. C.).....	130	140
Springsteen Mills (S. C.).....	100	100
Tucapau Mills (S. C.).....	250	250
Trion Mfg. Co. (Ga.).....	140	140

Union-Buffalo Mills (S.C.) 1st Pfd.....	64	67
Victor Mfg. Co. (S. C.).....	120	127
Warren Mfg. Co. (S. C.).....	93½	95
Warren Mfg. Co. (S. C.) Pfd.....	106	106
Washington Mills (Va.).....	28	30
Washington Mills (Va.) Pfd.....	106	109
Whitney Mfg. Co. (S. C.).....	120	140
Williamson Mills (S. C.).....	112	115
Wiscasset Mills (N. C.).....	125	135
Woodruff Cotton Mills (S. C.).....	130	135
Woodside Cotton Mills (S. C.).....	96	100
Woodside Cot. Mills (S. C.) Pfd.....	95	96

Bank Statements.

The International Trust Co. of Maryland at Baltimore reports at close of business June 30, 1909, investments, \$2,632,907; loans secured, \$1,444,166; cash on hand and in banks, \$257,169; capital stock, \$1,500,000; surplus, \$1,000,000; undivided profits, \$96,617; deposits, \$2,133,974; total assets, \$4,730,592. Douglas H. Gordon is president; Summerfield Baldwin and Samuel C. Rowland, vice-presidents; Chas. D. Fenhagen, secretary and treasurer, and Walter D. Focke, assistant secretary and assistant treasurer.

FINANCIAL CORPORATIONS.

ALABAMA.

Jasper, Ala.—The Pickens County Bank has begun business with directors thus: John H. Carter, president; R. L. McClain, vice-president; H. B. Crawford, cashier; Sam Tate, John W. Freeman, J. M. Eaton and H. K. Wood.

Scottsboro, Ala.—Official: The J. C. Jacobs Banking Co. will probably be organized about October 1 to December 1 and will be a private bank, under the management of J. C. Jacobs, E. P. Jacobs, N. E. Jacobs and Annie Coffey.

ARKANSAS.

Little Rock, Ark.—The Arkansas Life Insurance Co. is reported organized with \$200,000 capital. Directors: W. W. Hurst, president; C. Strickland, secretary and treasurer; George R. Stanford, vice-president, and R. H. Wolfe.

FLORIDA.

Crescent City, Fla.—A bank is reported organized with \$15,000 capital; K. Barson of Crescent City, president; Herbert B. Race of Jacksonville, vice-president, and C. K. Jones of Valdosta, Ga., cashier.

GEORGIA.

Davidson, Ga.—The Merchants and Farmers' Bank has organized by electing directors thus: John D. Walker, president; W. C. Wilson, vice-president; S. J. Taylor, Jr., cashier; A. Y. H. Jordan, W. J. Henderson, Dr. W. V. Walden, O. H. P. Beall, J. L. Hattaway and Joseph W. Aldred.

Dacula, Ga.—Official: The Dacula Banking Co. incorporated; capital \$25,000, paid in; A. M. Wilson, president; W. T. Hinton, vice-president; E. S. Hogan, R. M. Stanley, G. W. Sikes, S. E. Pharr and J. M. Wilson.

Hephzibah, Ga.—A new bank is reported being organized.

Savannah, Ga.—The Georgia State Savings Association has filed its charter; capital \$325,000. Incorporators: B. H. Levy, Edward W. Bell, Julian Schley, H. E. Dreeson, C. G. Anderson, Jr., W. B. Stillwell, J. F. Buckner, W. K. Bell, G. W. Tiedeman and Fred T. Saussy.

MISSISSIPPI.

Water Valley, Miss.—The People's Bank of Water Valley is reported organized and expects to begin business about September 1; directors, F. H. Smith, J. G. Neudorfer, G. W. Rayburn, J. M. Walker, J. T. Ware, J. I.

Vaughn, T. L. Boydston, J. W. Mackey, G. W. Armstrong, J. R. McClellan, M. C. Knox, T. O. Gore, John W. Tarver, E. W. Hartwell, Everett Cock, E. T. Block, C. T. Robinson and W. M. Hendricks.

MISSOURI.

St. Louis, Mo.—The North St. Louis Trust Co. is being organized with \$100,000 capital and \$10,000 surplus. Among those interested are Henry H. Oberschelp, Missouri Trust Bldg., St. Louis, and A. W. Pauley.

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BONDS

We Buy and Sell Entire
Issues of Municipal,
County and School
Bonds.

SOUTHERN ISSUES
A SPECIALTY

OFFICE OF VIRGINIA-CAROLINA CHEMICAL CO.

Richmond, Va., July 13, 1909.

The Board of Directors of VIRGINIA-CAROLINA CHEMICAL COMPANY have this day declared a dividend of Three Per Cent. on the common stock of the Company, payable August 20, 1909, to stockholders of record at 3 P. M. on August 5, 1909, and the transfer books for the common stock will be closed from 3 P. M. on August 5, 1909, to 10 A. M. on August 20, 1909. Checks will be mailed.

S. W. TRAVERS, Treas.

Wm. F. Bockmiller, Pres. John G. Hallett, Sec.

NORTH CAROLINA.

Alderson, N. C.—The Alderson National Bank has organized by electing T. H. Jarrett, president; John Hinchman, vice-president; O. D. Massey, cashier, and W. W. Stevens, assistant cashier; directors, T. H. Jarrett, John Hinchman, O. D. Massey, E. H. Campbell and Mark L. Jarrett.

Charlotte, N. C.—A building and loan association is reported being organized by Dermot Shemwell, E. B. Craven, S. E. Williams, James Adderton and G. W. Montcastle.

Graham, N. C.—The Graham Real Estate, Loan & Insurance Co., capital \$25,000, incorporated by Jacob Long and others.

Matthews, N. C.—The Bank of Matthews, recently organized, has elected Robert L. Steele of Rockingham, president, and B. D. Funderbunk, vice-president.

OKLAHOMA.

Hugo, Okla.—The Hugo Loan & Investment Co. incorporated with \$50,000 capital. Directors: J. F. McRoyneids and W. R. Wood of Paris, Texas; G. W. Dodd of Grant, Jesse W. Davis, J. H. Jackson, C. L. Webb and C. G. Shell of Hugo.

Morris, Okla.—Chartered: The First State Bank of Morris; capital \$10,000; incorporators, J. B. Jones, Eugene M. Kerr and W. B. Fundy, all of Muskogee. The new bank will take over the present State Bank of Morris.

Nowata, Okla.—Official: The Producers' State Bank incorporated; capital \$50,000; directors, W. A. Chase, president; A. Campbell, vice-president; F. B. Reynolds, cashier; E. W. Moore, W. J. Kirkwood, Wm. Moyer and J. L. Kiskaddon. A. J. Reynolds is assistant cashier.

Orr, Okla.—Official: The Farmers' State Guaranty Bank of Orr, Okla., chartered; capital \$10,000; directors, J. D. Batson, John G. Butler and Leo Hughes.

Shattuck, Okla.—Chartered: The Shattuck State Bank; capital \$30,000; incorporators, J. T. Hastings, M. O. Murphy, W. E. Stuart, J. C. Stuart and C. E. Biglow, all of Woodward.

Thomas, Okla.—Official: The Farmers' State Guaranty Bank incorporated; capital \$25,000. Incorporators: J. S. Hustin, president, Thomas; E. E. Cressler, Okeme, Okla., and J. W. Cornell of Thomas.

SOUTH CAROLINA.

Camden, S. C.—The Camden Loan & Realty Co. has been organized with \$10,000 capital; directors, C. J. Shannon, Jr., president; D. R. Williams, vice-president; John T. Mackey, secretary and treasurer; L. A. Wittkowsky, attorney; W. R. Hough, Geo. T. Little, W. J. Dunn, M. H. Heyman and L. L. Block.

Greenville, S. C.—The Southern Mortgage Co. of Greenville has been incorporated with \$25,000 capital by H. H. Harris and Thomas A. Miller.

TENNESSEE.

Big Sandy, Tenn.—Chartered: The Farmers' Bank of Big Sandy; capital \$1500; incorporators, J. M. Moses, J. B. Cox, T. A. Rushing, J. W. Odom, E. H. Dowdy, S. F. Baker, W. R. Cooper, G. W. E. Herrin, R. I. Hargis and John Askew.

Highland Park, P. O. Chattanooga, Tenn.—A new bank capitalized at \$15,000 is being organized by Lawrence Parkhurst, W. H. McCarroll, J. A. Wheeler, F. W. Owens, F. L. Cessau, James B. Dawson, B. M. Jones, J. T. Edwards, Beechmont; E. H. Smith, New Castle; Chilton-Guthrie Trunk & Bag Manufacturing Co., N. A. Richardson, Frank E. Bayens, N. C. Cureton, Louisville; S. E. Funk and R. T. Baker.

Huntingdon, Tenn.—Reported that a new bank, organized with \$25,000 capital, will begin business about December 1.

Mt. Pleasant, Tenn.—The Farmers and Merchants' Bank will, it is reported, soon begin business; capital \$25,000; incorporators, C. A. Brownlow, E. M. Kindel, J. T. Jenkins, W. A. Kittrell, M. J. Orr, James H. Ward, J. P. Warnock and Ed. Orr. Cecil Brownlow will be cashier, and H. G. Kittrell, assistant cashier.

Trenton, Tenn.—The Southern Credit Co., capital \$15,000, has been incorporated by A. J. Elwood, R. B. Boone, M. H. Holmes, Trenton; C. R. Wade, C. T. Arnold, G. W. Reed, Henry Flowers, Kenton, and J. L. Hoguewood, Rutherford.

TEXAS.

Barry, Texas.—The First State Bank of Barry has filed its charter; capital \$10,000; stockholders, F. N. Dram, Corsicana; T. C. Boswell, T. A. Hutchisson and W. D. Powell, Barry, and J. L. Marshall, Dram.

DeKalb, Texas.—Chartered: The First State Bank; capital \$25,000. Incorporators: G. W. Blakeney, T. J. Record, J. H. Simms and J. W. Clark.

Donna, Texas.—A State bank is reported being organized.

Eastland, Texas.—Official: The Eastland County Land & Abstract Co. chartered; capital \$15,000; A. H. Johnson, president, and A. B. Johnson, vice-president, both at Cisco, Texas, and C. U. Connelley, secretary and treasurer, Eastland, Texas.

Frost, Texas.—The Citizens' State Bank of Frost will, it is stated, begin business about August 15 with R. J. Sanders, president; L. A. Morgan, vice-president; J. R. Slay, vice-president, and J. W. Blake, cashier.

Hatchell, Texas.—The First State Bank of Hatchell; capital \$10,000. Incorporators: J. R. Holliday, J. W. Murray of Hatchell, R. G. Erwin of Balinger.

Marfa, Texas.—Chartered: The Marfa State Bank; capital \$10,000; incorporators, J. E. Nunn, T. H. Brown, Jr., of Fort Davis and T. H. Wilson of Marfa.

Post City, Texas.—The First National Bank of Post City has been authorized to begin business; capital \$50,000. H. H. Herb is president; W. O. Stevens, cashier.

VIRGINIA.

Basic, City, Va.—Chartered: The People's Southern Cent Savings Bank; capital \$10,000 to \$50,000; D. W. Baker, president; C. H. Leach, vice-president; Eugene Tyree, treasurer, and Ernest Johnson, secretary and cashier.

Danville, Va.—The Danville Savings, Loan & Investment Co. incorporated; capital \$2000 to \$10,000; W. H. Jones, president; A. T. Pritchett, vice-president; W. P. Allen, secretary and treasurer.

Mt. Ida, Va.—The Bank of Potomac is reported being organized with \$25,000 capital.

Rapidan, Va.—The State Bank of Rapidan has been incorporated with from \$10,000 to \$25,000 capital; H. T. Holladay, Jr., president; F. E. Garnett, vice-president; G. W. Peyton, secretary and cashier.

Suffolk, Va.—Official: The Nansemond Building Association incorporated; capital \$150,000; W. B. Ferguson, president; R. L. Brewer, financial secretary; J. E. B. Holladay, attorney; A. W. Woolford, W. S. Cross, Walter Jordan and W. B. Ferguson, directors.

WEST VIRGINIA.

Huntington, W. Va.—Approved: The American National Bank of Huntington; capital \$100,000; organizers, H. C. Harvey, H. S. Crobley, R. L. Hutchinson, J. T. Graham and L. A. Daniel.

Kenova, W. Va.—The Kenova Banking & Savings Co. expects to begin business August 1 with J. S. Miller, president; A. Jackson, vice-president, and K. B. Cecil, cashier.

NEW SECURITIES.

ALABAMA.

Gadsden, Ala.—Steiner Bros. of Birmingham have purchased \$40,000 of 5 per cent. 30-year refunding sewer bonds.

ARKANSAS.

Russellville, Ark.—The Mercantile Trust Co. of Little Rock is said to be the purchaser of the \$18,000 of sidewalk bonds, recently reported sold.

Van Buren, Ark.—A. M. Morow, Pine Bluff, is reported to have purchased at par in payment for work \$309,600 of 6 per cent. 20-30-year Crawford county levee bonds.

FLORIDA.

Key West, Fla.—An election is to be held within 60 days to vote on paving bonds.

GEORGIA.

Allapaha, Ga.—Bids will be received until noon July 31 by J. V. Dorminey, Mayor, for \$8000 of 5 per cent. 30-year school-building bonds.

Brunswick, Ga.—Reported that Glynn county will issue \$100,000 of road bonds.

Commerce, Ga.—Reported that bids will be received until August 15 for \$8000 of 5 per cent. sewer bonds.

Columbus, Ga.—An election is to be held August 19 to vote on \$75,000 of 4½ per cent. hospital bonds. M. M. Moore is clerk of Council.

Newnan, Ga.—J. H. Hilsman & Co. of Atlanta has been awarded at \$533.33 and accrued interest \$16,000 of 5 per cent. school bonds.

Thomaston, Ga.—An election is to be held August 23 to vote on \$15,000 of 6 per cent. bonds to rebuild R. E. Lee Institute building and auditorium.

KENTUCKY.

Fullerton, Ky.—Voted: \$3500 of school-building bonds.

Newport, Ky.—C. A. Keslar, City Auditor,

will receive bids until 5 P. M. July 30 for \$30,400 of 5 per cent. sewer bonds.

LOUISIANA.

Denham Springs, La.—The Bank of Denham Springs, acting as fiscal agent for Denham Springs High School District, is reported to be offering \$7500 of 5 per cent. bonds.

Patterson, La.—Reported that Castel & Trefny of New Orleans have purchased at private sale \$30,000 of 5 per cent. water-works bonds.

Tallulah, La.—September 14 an election is to be held to vote on \$40,000 of Canal Bayou drainage district bonds.

MISSISSIPPI.

Leakesville, Miss.—Reported that plans are being made to issue \$7000 of school bonds.

West Point, Miss.—J. L. Young, City Clerk, will receive bids until 6 P. M. August 9 for \$20,000 of street improvement and \$7000 of school 5 per cent. 20-year bonds.

MISSOURI.

Kansas City, Mo.—Defeated: \$4,125,000 of public improvement bonds.

Maryville, Mo.—Nodaway county is reported to be considering an issue of \$100,000 of bridge bonds.

Monett, Mo.—Bids will be received by Perry Short, Mayor, until 8 P. M. July 27 for \$35,000 of 4½ per cent. 5-20-year electric-light bonds.

Springfield, Mo.—Local investors are reported to have purchased \$30,000 of current-expense bonds.

St. Louis, Mo.—Reported that on September 17 the city will sell \$4,700,000 of municipal improvement bonds.

Webb City, Mo.—Defeated: \$8500 of sewer bonds.

NORTH CAROLINA.

Albemarle, N. C.—July 27 city will vote on water, light, sewer, street and school bonds to the amount of \$67,000.

Deep Creek, N. C.—August 21 an election will be held to vote on \$30,000 of bonds in aid of the Statesville Air Line Railroad.

Forbush, N. C.—An election will be held August 21 to vote on \$5000 of bonds in aid of Statesville Air Line Railroad.

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Liberty, N. C.—An issue of \$40,000 of bonds in aid of the Statesville Air Line Railroad will be voted on August 21.

Monroe, N. C.—The Security Trust Co. of Spartanburg has been awarded at \$1500 premium \$25,000 of bonds for repairs to water and light plant and to refund indebtedness.

Raleigh, N. C.—The \$500,000 of State hospital bonds have been validated.

Salisbury, N. C.—Reported that an election is to be held to vote on \$125,000 of railroad bonds.

OKLAHOMA.

Ardmore, Okla.—The election to be held in Carter county August 17 is for the purpose of voting on \$125,000 of courthouse bonds. Wm. B. Frame is County Clerk.

Caddo, Okla.—Bids will be received until 8 P. M. August 2 for \$55,000 of 5 per cent. 25-year water-works bonds. Address H. G. Huffman, City Clerk.

Chandler, Okla.—The Oklahoma Bond & Trust Co. is reported to have purchased \$25,000 of sewer bonds at par and accrued interest.

Cleveland, Okla.—Bids will be received by J. M. Crady, deputy City Clerk, until 6 P. M. August 2 for \$15,000 of 6 per cent. 20-year bonds to take up warrant indebtedness.

Minco, Okla.—Voted: \$10,000 of water-works bonds.

Norman, Okla.—A. J. McMahon of Oklahoma City is reported to have been awarded \$10,000 of 5 per cent. 25-year school-equipment bonds.

Mounds, Okla.—A. B. Leach & Co. of Chicago is reported to have been awarded at 102.05 and interest \$75,000 of 5 per cent. Creek county high-school bonds.

Mounds, Okla.—D. B. Welty of Oklahoma City is reported to have purchased at par \$20,000 of 5 per cent. 20-year water-works bonds.

Tulsa, Okla.—Approved: \$24,000 of funding bonds recently purchased by Spitzer & Co. of Toledo, Ohio.

Verden, Okla.—An issue of \$13,000 of school-building bonds is reported under consideration.

Wagoner, Okla.—Reported that an election is to be held in August to vote on \$200,000 of water-works, light, City Hall and funding bonds.

Wilburton, Okla.—Voted: \$50,000 of water-works purchase and improvement bonds and \$25,000 of sewer bonds.

SOUTH CAROLINA.

Gaffney, S. C.—An issue of \$125,000 of bonds has been declared valid by the Supreme Court.

Newberry, S. C.—Reported that Newberry county will vote July 28 on \$300,000 of road bonds.

Spartanburg, S. C.—Reported that an election is to be held in Spartanburg county August 24 to vote on \$400,000 of road improvement bonds.

TENNESSEE.

Blountville, Tenn.—Reported that \$200,000 of Sullivan county road bonds will soon be offered for sale.

Chattanooga, Tenn.—Reported that the \$25,000 of 6 per cent. water bonds of Mission Ridge Taxing District will not be sold, a contract having been made with the local water company to build and operate a plant.

Jackson, Tenn.—Bids will be received until noon July 31 by F. E. Howard, City Auditor, for \$10,000 of 5 per cent. city improvement and \$5,000 of district improvement bonds.

Hennings, Tenn.—Bids will be received until 10 A. M. July 30 by J. R. Gregory, Town Treasurer, for \$15,000 of 5 per cent. 10-30-year school bonds.

Jellico, Tenn.—Voted: \$30,000 of public improvement bonds.

Morristown, Tenn.—Bids will be received until 10 A. M. August 23 for \$200,000 of 5 per cent. 30-year Hamblen county turnpike bonds. Address J. N. Fisher, chairman Hamblen County Pike Commissioners.

Ooltewah, Tenn.—Bids will be received until noon August 23 by T. H. Stokes, secretary selling commissioners, for \$10,000 of 5 per cent. 20-year James county high-school bonds.

TEXAS.

Albany, Texas.—Approved: \$30,000 of 5 per cent. school-bonds.

Anna, Texas.—J. E. Adams, secretary School Board, is offering for sale \$14,000 of 5 per cent. 40-year bonds of Anna Independent School District.

Anson, Texas.—Approved: \$7500 of 5 per cent. bonds of Jones county school district No. 5.

Anson, Texas.—Approved: \$28,000 of 6 per cent. water-works bonds.

Austin, Texas.—The State Penitentiary Board is reported to be preparing to issue \$300,000 of 5 per cent. bonds, \$150,000 being redemption and the remaining \$50,000 for completion of the State railroad into Palestine.

Austin, Texas.—The State Board of Education has purchased \$5000 of 5 per cent. Wood county bonds.

Beaumont, Texas.—Reported that the election to vote on \$100,000 of school and 75,000 of sewer-extension bonds will be held August 31.

Blooming Grove, Texas.—An issue of \$14,000 of 5 per cent. 15-30-year school-building bonds will be sold on August 10.

Boerne, Texas.—Voted: \$7000 of Kendall county courthouse bonds.

Bryan, Texas.—The election to vote on \$10,000 of 5 per cent. 50-year city-hall, fire-station and opera-house bonds is to be held August 10.

Coffeyville, Texas.—Reported that an election will be held August 10 to vote on \$30,000 of school bonds.

Del Rio, Texas.—The \$30,000 of 5 per cent. 10-40-year school-building bonds were purchased by C. H. Coffin of Chicago at \$251 premium.

Garza, Texas.—Approved: \$4000 of school bonds.

Gustine, Texas.—Bids will be received until noon August 15 by W. M. Scott, secretary Board of Education, for \$8000 of 5 per cent. 10-40-year school-building bonds.

Hereford, Texas.—Approved: \$25,000 of 5 per cent. water-works bonds.

Houston, Texas.—Approved: \$200,000 of 5 per cent. 40-year Harris county drainage bonds of district No. 2.

Jacksonville, Texas.—Official: \$25,000 of 5 per cent. 10-40-year bonds of Jacksonville independent school district will soon be issued. J. E. McFarland is secretary board of trustees.

Harper, Texas.—Voted: \$1400 of 5 per cent. 20-40-year school-building bonds.

Johnson City, Texas.—Approved: \$6000 of 5 per cent. 40-year bonds of school-district No. 11.

Kosse, Texas.—Approved: \$10,000 of 5 per cent. school bonds.

Lexington, Texas.—Voted: \$10,000 of school bonds.

Lillian, Texas.—Reports state that all bids received July 15 for the \$6000 of 5 per cent. 10-30-year school-building bonds were rejected.

Longview, Texas.—Approved: \$40,000 of 5 per cent. school bonds.

Midland, Texas.—Approved: \$30,000 of 5 per cent. 20-40-year school bonds.

Quanah, Texas.—August 11 city will vote on \$30,000 of water-works-extension bonds.

Seymour, Texas.—J. H. Canusey & Co. is reported to have purchased \$35,000 of 5 per cent. 20-40-year water-works and sewer bonds at 1.02%.

Venus, Texas.—Bids will be received by B. C. Kelly, president Board of Trustees, until 3 P. M. July 31 for \$20,000 of 5 per cent. school bonds.

Winnboro, Texas.—Voted: \$18,000 of water-works bonds.

WEST VIRGINIA.

Kenova, W. Va.—Edmund Seymour & Co. of New York are said to be the purchasers of the \$40,000 of 5 per cent. 15-30-year paving bonds recently reported sold.

At Anna, Texas, bids will be received for \$14,000 of 5 per cent. 40-year Anna Independent School District bonds. Further particulars will be found in the advertising columns.

At Ooltewah, Tenn., bids will be received until noon August 23 for \$10,000 of 5 per cent. 20-year James county high-school bonds. Further particulars will be found in the advertising columns.

At Lynchburg, Va., bids will be received until noon August 16 for \$400,000 of 4 per cent. 30-year public-improvement bonds. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

The Morristown Bank & Trust Co., Morristown, Tenn., it is reported, will increase its capital \$25,000.

The Porter State Bank of Porter, Okla., is reported to have increased its capital from \$10,000 to \$15,000.

The Citizens' National Bank of Frederick, Md., has occupied its new building at Market and Patrick streets.

The Bartlett National Bank of Bartlett, Texas, is reported to have increased its capital from \$35,000 to \$70,000.

The Bank of Sevierville at Sevierville, Tenn., is reported to have increased its capital from \$40,000 to \$50,000.

The First National Bank of Hendersonville, N. C., according to a report, will increase its capital from \$50,000 to \$100,000.

The Great American Life Insurance Co. and the International Life Insurance Co. are reported consolidated under the title of the International Life Insurance Co. of St.

Louis, Mo., with a combined capital and surplus of more than \$1,500,000. E. Massey Wilson is president.

A letter to the Manufacturers' Record says that the Lorene Cotton-Oil Mills, Mooresville, N. C., will offer for sale \$25,000 of 10-year 6 per cent. bonds.

The Dixie Fire Insurance Co. of Greensboro, N. C., is reported to have absorbed the North State Fire Insurance Co. of the same city.

Reported that the Bank of Lilesville at Lilesville, N. C., is to be converted into a national bank and the capital increased from \$10,000 to \$25,000.

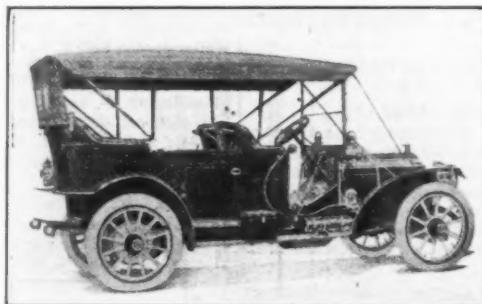
The First National Bank of Hendersonville, N. C., it is reported, has increased its capital from \$50,000 to \$100,000 and has taken possession of its new building.

Announcement is made that the overdue coupons on Seaboard Air Line Railway first mortgage bonds will be paid upon depositing them and the bonds under the adjustment plan with either the Morton Trust Co. of New York, American Trust Co. of Boston, Continental Trust Co. of Baltimore or the Bank of Richmond, Richmond, Va.

A condensed statement of 446 banks and bank and trust companies in Texas at close of business June 23 shows: Loans, \$31,206,783; due from banks, \$12,081,890; cash items, currency and specie, \$4,140,284; capital stock paid in, \$13,078,500; surplus fund, \$1,087,591; undivided profits, \$1,192,463; due to other banks, \$3,969,005; total deposits, \$30,485,734; total resources, \$52,739,360.

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PROPOSALS.

Bids Wanted for Macadamizing Public Road

Staunton, Va., June 26, 1909.
Bids will be received at the office of the Clerk of the Circuit Court until Monday, August 23, 1909, at 12 o'clock noon, for the construction of about 4½ miles of macadam road in Augusta county (Greenville road). Plans and specifications on file at the Clerk's office in the city of Staunton and at the office of the State Highway Commissioner at Richmond, Va. Specifications furnished on application to the State Highway Commissioner. A certified check for \$200 to accompany each bid. An engineer will be at the Clerk's office in Staunton on Saturday, August 14, at 9 o'clock A. M. to go over the ground with prospective bidders. The right is reserved to reject any and all bids.

BOARD OF SUPERVISORS
FOR AUGUSTA COUNTY.
By Harry Burnett, Clerk.

Proposals Wanted

DEPARTMENT OF PUBLIC WORKS.
AUGUSTA, GA., July 23, 1909.
Sealed proposals will be received by the Canal and River Commission of Augusta, Ga., until 12 M. Tuesday, August 17, 1909, for furnishing all material, tools and labor and excavating a drainage canal approximately three and one-half miles long, thirty feet wide and six feet deep.
A certified check for five hundred dollars (\$500) must be deposited with each bid as a guarantee of good faith.
The Canal and River Commission reserves the right to reject any or all bids.
F. B. POPE, Chairman.
NIBBET WINGFIELD, Chief Engineer.

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One 10 H. P. New Era Gas Engine, first-class condition.
One 42"x16" Lathe.
One Planer, 33"x33"x6", single head.
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ONE 25-TON HEALY REFRIGERATING MACHINE.
Operated only 9 months. Condition guaranteed.
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Chicago.

PROPOSALS

PUBLIC BUILDINGS, CONSTRUCTION BONDS, MISCELLANEOUS.

GOVERNMENT PROPOSALS

PROPOSALS FOR ELECTRICAL MATERIAL.—Including Fixtures, Fittings, Batteries, Cable, Wire, Line Material, Lineman's Tools, Hardware, Mica, Soldering Material, Insulating Varnish, Conduit, Molding, Rubber Gloves, Tape, etc. Sealed proposals will be received at the office of the General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10:30 A. M., August 10, 1909, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and general information relating to this Circular (No. 526) may be obtained from this office or the offices of the Assistant Purchasing Agents, 24 State street, New York city; 55 National Realty Building, New Orleans, La.; and 1086 North Point street, San Francisco, Cal.; also from the U. S. Engineer Offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Md.; Philadelphia, Pa.; Pittsburgh, Pa.; Boston, Mass.; Buffalo, N. Y.; Cleveland, Ohio; Cincinnati, Ohio; Chicago, Ill.; St. Louis, Mo.; Detroit, Mich.; Milwaukee, Wis.; St. Paul, Minn.; Chattanooga, Tenn.; Louisville, Ky.; Mobile, Ala.; and Galveston, Texas; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill.; and Chamber of Commerce and Board of Trade, Tacoma, Wash. F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

TREASURY DEPARTMENT. Office of the Supervising Architect, Washington, D. C., July 22, 1909.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 31st day of August, 1909, and then opened for the construction, excepting mechanical equipment and interior finish, of the U. S. Postoffice and Courthouse at New Orleans, La., in accordance with the drawings and specifications, copies of which may be had at this office, or at the office of the Architects, Messrs. Hale & Rogers, 11 East 24th street, New York, N. Y., after July 26, 1909, at the discretion of the Supervising Architect. Applications must be accompanied by a certified check for \$250, which will be held at this office until the return of the drawings and specification. JAMES KNOX TAYLOR, Supervising Architect.

DEPARTMENT OF THE INTERIOR. Washington, D. C., July 17, 1909.—Sealed proposals in duplicate will be received at the Department until 2 o'clock P. M. on Tuesday, August 17, 1909, for remodeling the boiler plant at the Government Hospital for the Insane, at Washington, D. C., in accordance with drawings and specifications, copies of which, with form of proposal, may be had on application at the Department. The right is reserved to reject any or all bids or waive technical defects, to accept one part and reject the other, as the interests of the Government may require. Proposals must be securely enveloped and plainly marked "Proposals for Remodeling Boiler Plant Government Hospital for the Insane" and be addressed to the Secretary of the Interior. FRANK PIERCE, Acting Secretary.

PROPOSALS FOR WATER AND SEWER SYSTEM.—Office of the Quartermaster, 416 Hibernia Bank Building, New Orleans, La., July 1, 1909. Sealed proposals in triplicate for the construction of a water and sewer system at Fort St. Philip, La., including steel tank and trestle and concrete reservoir, will be received here until 12 M. August 2, 1909, and then opened. Information, plans and specifications furnished on application. Envelopes containing proposals should be indorsed "Proposals for Water and Sewer System at Ft. St. Philip, La." and addressed to LOUIS F. GARRARD, JR., Captain and Q. M.

POSTOFFICE DEPARTMENT. Washington, D. C., June 9, 1909. Sealed proposals will be received at the office of the Purchasing Agent of this Department until 2 o'clock P. M. August 2, 1909, for furnishing Postal Cards for the postal service. Proposals for a term of four years beginning January 1, 1910, and also for a one-year term are desired. Blanks for proposals, specifications and instructions to bidders will be furnished upon application to the Purchasing Agent, Postoffice Department, Washington, D. C. F. H. HITCHCOCK, Postmaster-General.

MACHINES FOR TABULATING AGRICULTURAL STATISTICS.—The Director of the Census is considering various types of machines with a view to determining the one best adapted for tabulating the agricultural statistics of the Thirtieth Census. Anyone possessing a machine adapted for this purpose is invited to present the same for test in practical operation at the Bureau of the Census, Washington, D. C., on or before July 31, 1909. For further information address E. DANA DURAND, Director of the Census, Department of Commerce and Labor, Washington, D. C.

SEALED PROPOSALS will be received at the office of the Director of the Census, Washington, D. C., until 2 o'clock P. M. August 9, 1909, and then publicly opened, for furnishing all the labor, materials and work necessary for the construction in lots of 60, 75, 100 or 125 tabulating machines and delivering the same complete, free of all charges for transportation, at the Census Building, Washington, D. C. The right is reserved to reject or accept any or all bids in whole or part, to strike out any item or items in the specifications, and to waive any defects. For specifications, blueprint drawings, blank proposals and full information address E. DANA DURAND, Director of the Census, Department of Commerce and Labor, Washington, D. C.

OFFICE OF CONSTRUCTING QUARTERMASTER. U. S. Army, Baltimore, Md., July 27, 1909. Sealed proposals in triplicate will be received at this office until 10 o'clock A. M. August 27, 1909, and then opened, for the construction of about 15,000 square feet of granolithic sidewalk at Fort Howard, Md. Plans and specifications may be seen at this office. Necessary blank forms and full information furnished upon application here. The United States reserves the right to reject any or all bids or to accept any part of a bid that may be advantageous to the Government. Envelopes containing proposals must be plainly indorsed "Proposals for Construction of Sidewalks at Fort Howard, Md." and addressed to Major C. C. BALLOU, U. S. Army, Constructing Quartermaster, Room 427 Custom-house, Baltimore, Md.

FORT MYER, VA., July 6, 1909. Sealed proposals in triplicate will be received at the Office of the Constructing Quartermaster until 11 o'clock A. M. August 4, 1909, and then opened: 1. For the construction of corral fences for two (2) artillery stables. 2. For the construction of corral fence for one (1) veterinary stable. Separate bid required on each item. Certified check or surety company's guarantee for ten per cent. of the amount must accompany the bid. Plans and specifications will be furnished on application. The Government reserves the right to reject any or all bids. Proposals should be indorsed "Proposals for Corral Fences" and addressed to CAPT. W. W. WHITESIDE, Constructing Quartermaster.

FORT MYER, VA., JULY 24, 1909. Sealed proposals in triplicate will be received at the Office of the Constructing Quartermaster until 11 o'clock A. M. August 13, 1909, and then opened for paving main passages with vitrified brick and concrete as an alternative, in four Cavalry Stables at Fort Myer, Va. Certified check or surety company's guarantee for ten per cent. of the amount must accompany each bid. Plans and specifications furnished upon application accompanied by a deposit of \$5 to insure safe return. The Government reserves the right to reject any or all bids. Proposals and envelopes should be marked "Proposals for Paving Cavalry Stables" and addressed to CAPTAIN W. W. WHITESIDE, Constructing Quartermaster.

NEW BOND OFFERINGS

School House Bonds For Sale

Fourteen thousand dollar forty year Anna Independent School District Schoolhouse Bonds, bearing interest at the rate of 5% per annum. Taxable values as follows: Personal property, \$86,065; real property, \$386,455; total, \$472,520. Said bonds dated September 1, 1909.

Address J. E. ADAMS, Secy. School Board, Anna, Texas.

\$27,000 West Point, Miss. Bonds

Sealed bids will be received until 6 o'clock P. M. August 9, 1909, by J. L. Young, City Clerk, for the purchase of \$20,000 Street Graveling and Curbing Bonds, \$2000 Colored Schoolhouse Bonds, of the city of West Point, Mississippi. These bonds will be dated September 1, 1909, will bear interest at 5 per cent., payable semi-annually, denomination \$500, payable in 20 years. Certified check for 10 per cent. of bonds must accompany each bid. The city reserves the right to reject any and all bids.

B. Y. RHODES, Mayor.

James County, Tenn., 5% 20-Year High-School Bonds

Sealed bids will be received until noon August 23, '09, for ten thousand (\$10,000.00) dollars James County five per cent. twenty-year High-School Bonds. Said bids must be filed or mailed to T. H. Stokes, Sec. of Selling Com., marked bids for High-School bonds, Ooltewah, Tenn. Each bid must be accompanied by certified check for two hundred (\$200) dollars, as an evidence of good faith. The right is reserved to reject any and all bids. For further information apply to B. F. Davis, Chalm. of County Court, or the undersigned.

T. H. STOKES, Sec. of Selling Com.

Ooltewah, Tenn.

STREET PAVING

Proposals for Graveling Streets

Sealed bids will be received until 6 o'clock P. M. August 9, 1909, by J. L. Young, City Clerk, for graveling the streets of the city of West Point, Miss., within the fire limits of the city and laying cement gutters also, according to plans and specifications on file in the City Clerk's office. No vacuities will be used for graveling. Cost, \$1.20 per ton f. o. b. West Point. Certified check for \$500 must accompany each bid. The city reserves the right to reject any and all bids.

B. Y. RHODES, Mayor.

Proposals for Paving Cherry Street

Mayor's Office, Vicksburg, Miss., July 23, 1909. Sealed proposals for paving Cherry street from Glass Bayou to Finney street with Asphalt, Bitulithic, Mineral Rubber, Granitoid, Vitrified Brick and Cressed Wooden Blocks will be received by the Mayor and Aldermen September 6, 1909, at 8 o'clock P. M. Bids must be submitted in two forms, with and without grading. Plans and specifications to be had on application to C. R. Twiss, City Engineer. Board reserves the right to reject any or all bids.

J. J. HAYES, Mayor.

Street Paving

OFFICE OF THE BOARD OF CONTROL, Norfolk, Va., July 10, 1909.

Sealed proposals will be received by the Board of Control at its office in the city of Norfolk, Va., until 12 o'clock A. M. on the 2d day of August, 1909, for regulating and paving with some smooth material the following streets and avenues in the said city, or parts thereof: Colonial avenue, Pembroke avenue, Warren Crescent, Bridge street, Botetourt street, Twelfth street, Holt street, Redgate avenue, Mowbray Arch east and Mowbray Arch west.

Specifications with limits of streets to be paved, instructions to bidders and approximate amounts of work required can be obtained on application to the City Engineer, Norfolk, Va.

Bids must be made on forms attached to the specifications separately for each street or avenue, or for such of them as the bidder may select, and all blanks in said bids must be legibly filled.

Certified checks for ten per cent. of the amount bid must accompany each separate proposal, under the conditions set forth in "Instructions to Bidders."

The right to reject any or all bids is reserved by the Board of Control.

THE BOARD OF CONTROL, Norfolk, Va.

W. T. BROOKE, City Engineer.

SEWERS

Sewer

OFFICE OF THE COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY. Incorporated.

Sealed proposals for the construction of a sewer known as Section "B" of the Western Interceptor, Contract No. 49 of the Comprehensive System of Sewerage for the City of Louisville, Ky., will be received at the office of the Commissioners of Sewerage until 12 o'clock noon August 6, 1909.

The work will consist mainly of building an unreinforced concrete sewer 3 ft. 6 in. and 5 ft. in diameter, total length about 4000 ft., and from 12 ft. to 25 ft. deep, and including about 1875 cu. yds. of concrete.

Plans and specifications may be seen at the office of the Commissioners, and at the office of Harrison P. Eddy, Consulting Engineer, 14 Beacon street, Boston, Mass.

Sealed bids should be endorsed "Proposal for Section 'B' Western Interceptor," and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent. (7%) of the total amount of the bid, or a "bidder's bond," as described in the form of proposal.

W. C. NONES, Chairman. CHAS. P. WEAVER, Secy. and Treas. J. B. F. BREED, Chief Engineer.

Proposals for Building Storm Sewers on Cherry Street

Mayor's Office, Vicksburg, Miss., July 23, 1909. Sealed proposals for building a storm sewer on Cherry street will be received by the Mayor and Aldermen on Monday evening, September 6, 1909, at 8 o'clock P. M. Plans and specifications to be had on application to C. R. Twiss, City Engineer. Board reserves the right to reject any or all bids.

J. J. HAYES, Mayor.

MISCELLANEOUS

School Lands For Sale

Kent county of Texas will offer its 17,712 acres of land for sale August 9, 1909. Proposals should be addressed to J. B. JAY, County Judge, Claiborne, Texas.

Proposals for School Building

Sealed bids will be received up to August 20, 1909, for the erection of a brick school building for Murphy School District. For plans and specifications call on Cunningham Brothers, Architects, Greenville, S. C. Certified check for \$500 to accompany bid. Right reserved to reject any and all bids. For further particulars address A. A. Fain, Murphy, N. C.

Proposals for Laying Water Mains on Cherry Street

Mayor's Office, Vicksburg, Miss., July 23, 1909. Sealed proposals for laying a water main on Cherry street will be received by the Mayor and Aldermen September 6, 1909, at 8 o'clock P. M. Plans and specifications to be had on application to C. R. Twiss, City Engineer. Board reserves the right to reject any or all bids.

J. J. HAYES, Mayor.

Proposals for Bridge

The Board of Commissioners of Buncombe County, N. C., will on Tuesday, August 17, 1909, receive proposals for the construction of a steel, concrete or combination bridge across the French Broad River at Asheville, N. C. Bids to be accompanied with plans and specifications. Bridge to be about 900 feet long, 23 feet in clear, 30 feet wide, besides 6-foot walkway. The Board reserves the right to reject any or all bids.

By order

J. E. RANKIN, Ch'm.

Proposals for Excavating and Grubbing

Aracadia, Texas, July 20, 1909. Sealed proposals, in duplicate, for excavating 450,000 cubic yards of material and clearing and grubbing 67 acres of bayou timber will be received until 3 P. M. Monday, August 30, 1909, and then publicly opened. Information furnished on application.

The Board of Commissioners, Galveston County Drainage District No. 1. CAPT. B. E. JOHNSON, Secy., Aracadia, Texas. R. W. LUTTRELL, Engineer, Galveston, Texas.

Coal Supply Bids Wanted

City of New Bern, North Carolina, will receive until noon August 2, 1909, sealed bids for supplying, as needed, steaming coal for water and light plant for one year beginning September 1, 1909; estimated requirement, between 3000 and 4000 tons.

Bids must state grade, quality and trade name, price delivered f. o. b. on siding at water and light plant at New Bern. City to pay freight as delivered and pay balance on or before 15th of each month for deliveries of previous month.

Right reserved to reject any and all bids.

Address bids to THOS. F. MCCARTHY, Chairman W. & L. Com.

60,000 Feet Concrete Sidewalks

On Monday, August 2, 1909, the Board of Aldermen of the City of Goldsboro, North Carolina, will receive sealed bids for the making of about sixty thousand (60,000) square yards of Concrete Sidewalk. Work must be done according to plans and specifications, which will be furnished by City Clerk upon application.

The city reserves the right to reject any and all bids.

Bids must be filed with City Clerk on or before 12 o'clock M. Monday, August 2, 1909.

D. J. BROADHURST, City Clerk.

BONDS FOR SALE CITY OF CHATTANOOGA, TENNESSEE \$900,000 WATERWORKS BONDS

Sealed bids will be received until 2 o'clock P. M. on Friday, August 13, 1909, for nine hundred thirty-year 4 1/2 per cent. semi-annual coupon bonds of the city of Chattanooga, Tennessee, for one thousand (\$1000) dollars each, dated July 1, 1909, principal and interest payable at the National City Bank, New York city.

Said issue of bonds will be denominated "Waterworks Bonds of the City of Chattanooga of 1907" and are issued for the purpose of purchasing or erecting a system of waterworks to supply water to the inhabitants of the city of Chattanooga and the environs or suburbs thereof.

Bids will be received for all of said issue only. All proposals must be accompanied by a certified check payable to the order of W. B. Cleave, City Treasurer, for one per cent. of the amount of the bonds bid for, the same to be forfeited if the bidder shall fail to accept and pay for bonds awarded. The right is reserved to reject any and all bids.

Address bids to

W. R. CRABTREE, Mayor, Chattanooga, Tennessee.

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